

WEBVTT

NOTE duration:"00:11:04.4800000"

NOTE language:en-us

NOTE Confidence: 0.866551756858826

00:00:00.000 --> 00:00:01.680 I am Michael block.

NOTE Confidence: 0.866551756858826

00:00:01.680 --> 00:00:03.360 I'm associate professor in

NOTE Confidence: 0.866551756858826

00:00:03.360 --> 00:00:05.259 the Child study center.

NOTE Confidence: 0.866551756858826

00:00:05.260 --> 00:00:08.116 I was also a resident in the

NOTE Confidence: 0.866551756858826

00:00:08.116 --> 00:00:10.480 solar Program from 2004 to two,

NOTE Confidence: 0.866551756858826

00:00:10.480 --> 00:00:12.485 2010 and now the associate

NOTE Confidence: 0.866551756858826

00:00:12.485 --> 00:00:14.490 Program Director of that program.

NOTE Confidence: 0.866551756858826

00:00:14.490 --> 00:00:16.814 Today I'm going to be trying to

NOTE Confidence: 0.866551756858826

00:00:16.814 --> 00:00:18.699 convince you that your astrological

NOTE Confidence: 0.866551756858826

00:00:18.699 --> 00:00:20.734 sign is associated with your

NOTE Confidence: 0.866551756858826

00:00:20.734 --> 00:00:22.910 risk for ADHD specifically,

NOTE Confidence: 0.866551756858826

00:00:22.910 --> 00:00:26.249 will be talking bout a meta analysis

NOTE Confidence: 0.866551756858826

00:00:26.249 --> 00:00:29.689 looking at the risk of 80 HD as

NOTE Confidence: 0.866551756858826

00:00:29.689 --> 00:00:32.170 a function of your birth date.

NOTE Confidence: 0.866551756858826

00:00:32.170 --> 00:00:35.106 So this is work that I've done with

NOTE Confidence: 0.866551756858826

00:00:35.106 --> 00:00:38.228 Jose Flores who's a resident in the

NOTE Confidence: 0.866551756858826

00:00:38.228 --> 00:00:40.533 adult psychiatry programs also work

NOTE Confidence: 0.866551756858826

00:00:40.614 --> 00:00:43.050 closely with the Child Study Center

NOTE Confidence: 0.866551756858826

00:00:43.050 --> 00:00:46.016 through the T 32 and we're going to

NOTE Confidence: 0.866551756858826

00:00:46.016 --> 00:00:48.981 be talking about ADHD and 80 HD is

NOTE Confidence: 0.866551756858826

00:00:48.981 --> 00:00:51.186 a child onset psychiatric disorder

NOTE Confidence: 0.866551756858826

00:00:51.186 --> 00:00:53.440 characterized by both inattention,

NOTE Confidence: 0.866551756858826

00:00:53.440 --> 00:00:53.862 hyperactivity,

NOTE Confidence: 0.866551756858826

00:00:53.862 --> 00:00:55.972 and impulsive iti that has

NOTE Confidence: 0.866551756858826

00:00:55.972 --> 00:00:58.020 an on set priority age,

NOTE Confidence: 0.866551756858826

00:00:58.020 --> 00:01:00.939 12 years and in affects hidden causes,

NOTE Confidence: 0.866551756858826

00:01:00.940 --> 00:01:02.708 symptoms in multiple settings.

NOTE Confidence: 0.866551756858826

00:01:02.708 --> 00:01:05.625 Home, school and or work and

NOTE Confidence: 0.866551756858826

00:01:05.625 --> 00:01:07.110 causes significant impairments.

NOTE Confidence: 0.866551756858826

00:01:07.110 --> 00:01:10.080 Also ADHD is quite heritable disorder,
NOTE Confidence: 0.866551756858826

00:01:10.080 --> 00:01:13.472 so it has a high degree of heritability
NOTE Confidence: 0.866551756858826

00:01:13.472 --> 00:01:16.156 as compared to other psychiatric
NOTE Confidence: 0.866551756858826

00:01:16.156 --> 00:01:18.484 disorders similar to autism.
NOTE Confidence: 0.866551756858826

00:01:18.490 --> 00:01:19.975 Schizophrenia, bipolar disorder.
NOTE Confidence: 0.866551756858826

00:01:19.975 --> 00:01:22.945 Much higher than depression or anxiety.
NOTE Confidence: 0.866551756858826

00:01:22.950 --> 00:01:26.415 When you look at a twin studies
NOTE Confidence: 0.866551756858826

00:01:26.415 --> 00:01:27.900 or molecular data.
NOTE Confidence: 0.866551756858826

00:01:27.900 --> 00:01:28.414 Also,
NOTE Confidence: 0.866551756858826

00:01:28.414 --> 00:01:30.984 there's a pretty clear brain
NOTE Confidence: 0.866551756858826

00:01:30.984 --> 00:01:33.360 signature associated with those CD.
NOTE Confidence: 0.866551756858826

00:01:33.360 --> 00:01:34.106 That is,
NOTE Confidence: 0.866551756858826

00:01:34.106 --> 00:01:34.852 with ADHD,
NOTE Confidence: 0.866551756858826

00:01:34.852 --> 00:01:37.642 that is that ADHD is associated with
NOTE Confidence: 0.866551756858826

00:01:37.642 --> 00:01:40.017 delayed development of the prefrontal
NOTE Confidence: 0.866551756858826

00:01:40.017 --> 00:01:43.097 brain regions that are involved in

NOTE Confidence: 0.866551756858826
00:01:43.097 --> 00:01:45.293 cognitive control processes involved
NOTE Confidence: 0.866551756858826
00:01:45.293 --> 00:01:49.880 in sustained attention and motor planning.
NOTE Confidence: 0.866551756858826
00:01:49.880 --> 00:01:52.484 So I'm going to be talking a
NOTE Confidence: 0.866551756858826
00:01:52.484 --> 00:01:54.509 little bit about my family,
NOTE Confidence: 0.866551756858826
00:01:54.510 --> 00:01:57.598 so this is a picture of my wife,
NOTE Confidence: 0.866551756858826
00:01:57.600 --> 00:01:57.986 Angie,
NOTE Confidence: 0.866551756858826
00:01:57.986 --> 00:02:01.460 and our three kids going from left to right,
NOTE Confidence: 0.866551756858826
00:02:01.460 --> 00:02:02.920 Sam, Paul, and Rachel.
NOTE Confidence: 0.866551756858826
00:02:02.920 --> 00:02:06.541 And this is a picture in Paul and Sam's
NOTE Confidence: 0.866551756858826
00:02:06.541 --> 00:02:09.241 and Rachel's kindergarten room at the
NOTE Confidence: 0.866551756858826
00:02:09.241 --> 00:02:12.416 Child Care Center at Bodel here at Yale.
NOTE Confidence: 0.866551756858826
00:02:12.420 --> 00:02:14.996 And Paul will be talking bout now
NOTE Confidence: 0.866551756858826
00:02:14.996 --> 00:02:17.819 is now bout to turn 8 years old.
NOTE Confidence: 0.866551756858826
00:02:17.820 --> 00:02:20.088 His birthday pretty soon he plans
NOTE Confidence: 0.866551756858826
00:02:20.088 --> 00:02:22.348 to have a YouTube channel where
NOTE Confidence: 0.866551756858826

00:02:22.348 --> 00:02:25.020 he where he plans to be a star.
NOTE Confidence: 0.866551756858826

00:02:25.020 --> 00:02:26.946 He doesn't know quite what he's
NOTE Confidence: 0.866551756858826

00:02:26.946 --> 00:02:29.371 gonna do on on his YouTube channel
NOTE Confidence: 0.866551756858826

00:02:29.371 --> 00:02:31.863 yet but he really likes to race
NOTE Confidence: 0.866551756858826

00:02:31.935 --> 00:02:34.377 Matchbox cars in my monster trucks.
NOTE Confidence: 0.866551756858826

00:02:34.380 --> 00:02:36.432 Watch Minecraft videos on YouTube and
NOTE Confidence: 0.866551756858826

00:02:36.432 --> 00:02:38.340 also really likes unboxing presence,
NOTE Confidence: 0.866551756858826

00:02:38.340 --> 00:02:41.572 so maybe he's I think he's hoping to
NOTE Confidence: 0.866551756858826

00:02:41.572 --> 00:02:45.205 have a career in that at this point.
NOTE Confidence: 0.866551756858826

00:02:45.210 --> 00:02:49.620 So a couple of years ago.
NOTE Confidence: 0.866551756858826

00:02:49.620 --> 00:02:51.786 Is the scene was very different
NOTE Confidence: 0.866551756858826

00:02:51.786 --> 00:02:53.230 in this kindergarten classroom,
NOTE Confidence: 0.866551756858826

00:02:53.230 --> 00:02:56.102 so both Sam and Paul were in kindergarten
NOTE Confidence: 0.866551756858826

00:02:56.102 --> 00:02:58.369 at Bloedel and I remember when I
NOTE Confidence: 0.866551756858826

00:02:58.369 --> 00:03:01.169 picked up all one day from kindergarten,
NOTE Confidence: 0.866551756858826

00:03:01.170 --> 00:03:03.246 he said I'm not as smart

NOTE Confidence: 0.866551756858826
00:03:03.246 --> 00:03:05.140 as all the other kids.
NOTE Confidence: 0.866551756858826
00:03:05.140 --> 00:03:07.790 I can't do what what they can do and and
NOTE Confidence: 0.866551756858826
00:03:07.860 --> 00:03:10.215 actually his experience was probably
NOTE Confidence: 0.866551756858826
00:03:10.215 --> 00:03:12.570 pretty accurate in that classroom.
NOTE Confidence: 0.866551756858826
00:03:12.570 --> 00:03:14.898 He was one thing you don't
NOTE Confidence: 0.866551756858826
00:03:14.898 --> 00:03:16.880 know about Paul and Sam,
NOTE Confidence: 0.866551756858826
00:03:16.880 --> 00:03:19.936 yet is that their birthday was right at
NOTE Confidence: 0.866551756858826
00:03:19.936 --> 00:03:23.147 the end of the calendar year in 2012,
NOTE Confidence: 0.866551756858826
00:03:23.150 --> 00:03:26.678 so they so they were born on December 13th,
NOTE Confidence: 0.866551756858826
00:03:26.680 --> 00:03:27.072 2012.
NOTE Confidence: 0.866551756858826
00:03:27.072 --> 00:03:29.424 So it did day after 1212.
NOTE Confidence: 0.871106386184692
00:03:29.430 --> 00:03:31.859 Twelve. That was hoping for and a
NOTE Confidence: 0.871106386184692
00:03:31.859 --> 00:03:34.130 little before the Mayan Apocalypse,
NOTE Confidence: 0.871106386184692
00:03:34.130 --> 00:03:36.090 which was twelve 2112 chairs.
NOTE Confidence: 0.871106386184692
00:03:36.090 --> 00:03:38.925 Also hoping for, but like you don't
NOTE Confidence: 0.871106386184692

00:03:38.925 --> 00:03:41.338 know and relevant to this potentially
NOTE Confidence: 0.871106386184692

00:03:41.338 --> 00:03:43.956 is that the cut off date for.
NOTE Confidence: 0.871106386184692

00:03:43.960 --> 00:03:46.618 Kindergarten and grades in school in
NOTE Confidence: 0.871106386184692

00:03:46.618 --> 00:03:48.720 Connecticut is actually January 1st,
NOTE Confidence: 0.871106386184692

00:03:48.720 --> 00:03:52.184 so both Paul and Sam were extremely young
NOTE Confidence: 0.871106386184692

00:03:52.184 --> 00:03:55.850 for their for their grade in school when
NOTE Confidence: 0.871106386184692

00:03:55.850 --> 00:03:59.099 they were starting out in kindergarten.
NOTE Confidence: 0.871106386184692

00:03:59.100 --> 00:04:01.515 And so their experience that they were,
NOTE Confidence: 0.871106386184692

00:04:01.520 --> 00:04:03.970 you know Paul's experience that he was
NOTE Confidence: 0.871106386184692

00:04:03.970 --> 00:04:06.469 behind all the other kids may actually
NOTE Confidence: 0.871106386184692

00:04:06.469 --> 00:04:09.129 be accurate and true at that age Ann.
NOTE Confidence: 0.871106386184692

00:04:09.130 --> 00:04:11.433 And So what we were really interested
NOTE Confidence: 0.871106386184692

00:04:11.433 --> 00:04:14.474 in a lot of and similarly a lot of
NOTE Confidence: 0.871106386184692

00:04:14.474 --> 00:04:17.089 patients that I come across in clinic.
NOTE Confidence: 0.871106386184692

00:04:17.090 --> 00:04:19.714 They get evaluated for 80 HD and they
NOTE Confidence: 0.871106386184692

00:04:19.714 --> 00:04:22.186 are often kind of really young for

NOTE Confidence: 0.871106386184692
00:04:22.186 --> 00:04:24.700 their age for their grade and young.
NOTE Confidence: 0.871106386184692
00:04:24.700 --> 00:04:26.430 And so the question is,
NOTE Confidence: 0.871106386184692
00:04:26.430 --> 00:04:28.185 is birthday to actually associated
NOTE Confidence: 0.871106386184692
00:04:28.185 --> 00:04:29.589 with the risk of.
NOTE Confidence: 0.871106386184692
00:04:29.590 --> 00:04:30.865 Of being diagnosed,
NOTE Confidence: 0.871106386184692
00:04:30.865 --> 00:04:33.415 you're treated for ADHD and we
NOTE Confidence: 0.871106386184692
00:04:33.415 --> 00:04:35.358 actually did a meta analysis.
NOTE Confidence: 0.871106386184692
00:04:35.360 --> 00:04:38.111 Jose and I involving 14 studies that
NOTE Confidence: 0.871106386184692
00:04:38.111 --> 00:04:40.640 were actually involved more than 3
NOTE Confidence: 0.871106386184692
00:04:40.640 --> 00:04:42.765 million children across nine countries.
NOTE Confidence: 0.871106386184692
00:04:42.770 --> 00:04:44.835 Looking at is there Association
NOTE Confidence: 0.871106386184692
00:04:44.835 --> 00:04:47.310 between birthdate and risk of ADHD.
NOTE Confidence: 0.871106386184692
00:04:47.310 --> 00:04:51.430 And is it related to the school cut off date?
NOTE Confidence: 0.871106386184692
00:04:51.430 --> 00:04:53.134 You know, in schools?
NOTE Confidence: 0.871106386184692
00:04:53.134 --> 00:04:56.749 And so when you look at risk of
NOTE Confidence: 0.871106386184692

00:04:56.749 --> 00:04:59.641 ADHD being diagnosed or treated by
NOTE Confidence: 0.871106386184692

00:04:59.641 --> 00:05:02.752 by birth month in school districts
NOTE Confidence: 0.871106386184692

00:05:02.752 --> 00:05:05.818 that have a January cut off,
NOTE Confidence: 0.871106386184692

00:05:05.820 --> 00:05:08.160 you see that there's a.
NOTE Confidence: 0.871106386184692

00:05:08.160 --> 00:05:10.968 There's an increasing risk of being
NOTE Confidence: 0.871106386184692

00:05:10.968 --> 00:05:13.310 diagnosed or treated for ADHD.
NOTE Confidence: 0.871106386184692

00:05:13.310 --> 00:05:17.046 As you get later in the calendar year.
NOTE Confidence: 0.871106386184692

00:05:17.050 --> 00:05:21.253 So as as when you're younger for your grade,
NOTE Confidence: 0.871106386184692

00:05:21.260 --> 00:05:23.660 so the largest odds ratios.
NOTE Confidence: 0.871106386184692

00:05:23.660 --> 00:05:26.644 For risk of 80 HD is in October,
NOTE Confidence: 0.871106386184692

00:05:26.650 --> 00:05:27.398 not November.
NOTE Confidence: 0.871106386184692

00:05:27.398 --> 00:05:28.520 The seven December,
NOTE Confidence: 0.871106386184692

00:05:28.520 --> 00:05:30.770 right before the January cut off,
NOTE Confidence: 0.871106386184692

00:05:30.770 --> 00:05:33.008 and it's the least in January,
NOTE Confidence: 0.871106386184692

00:05:33.010 --> 00:05:33.756 February, March,
NOTE Confidence: 0.871106386184692

00:05:33.756 --> 00:05:35.994 right after the January cut off.

NOTE Confidence: 0.871106386184692

00:05:36.000 --> 00:05:38.070 And if you look similarly in

NOTE Confidence: 0.871106386184692

00:05:38.070 --> 00:05:40.334 studies where the cut off for

NOTE Confidence: 0.871106386184692

00:05:40.334 --> 00:05:42.354 school district is September 1st,

NOTE Confidence: 0.871106386184692

00:05:42.360 --> 00:05:44.598 you see a very similar trend.

NOTE Confidence: 0.871106386184692

00:05:44.600 --> 00:05:47.656 I'll be it offset by four months for

NOTE Confidence: 0.871106386184692

00:05:47.656 --> 00:05:50.254 the different cut off date and then

NOTE Confidence: 0.871106386184692

00:05:50.254 --> 00:05:52.856 you see the highest risk of ADHD

NOTE Confidence: 0.871106386184692

00:05:52.856 --> 00:05:55.148 occurring in kids that are born.

NOTE Confidence: 0.871106386184692

00:05:55.150 --> 00:05:56.551 In August, July,

NOTE Confidence: 0.871106386184692

00:05:56.551 --> 00:05:57.018 June,

NOTE Confidence: 0.871106386184692

00:05:57.018 --> 00:06:00.731 right before the that our youngest for their

NOTE Confidence: 0.871106386184692

00:06:00.731 --> 00:06:04.011 school grade and you see the lowest risk

NOTE Confidence: 0.871106386184692

00:06:04.098 --> 00:06:07.297 of being diagnosed or treated for ADHD,

NOTE Confidence: 0.871106386184692

00:06:07.300 --> 00:06:09.550 being right after the school

NOTE Confidence: 0.871106386184692

00:06:09.550 --> 00:06:11.800 cut off date September October,

NOTE Confidence: 0.871106386184692

00:06:11.800 --> 00:06:13.520 November, December.
NOTE Confidence: 0.871106386184692

00:06:13.520 --> 00:06:16.100 And not surprisingly,
NOTE Confidence: 0.871106386184692

00:06:16.100 --> 00:06:21.428 when you overlay these two possible.
NOTE Confidence: 0.871106386184692

00:06:21.430 --> 00:06:23.971 Patterns for school cut off dates and
NOTE Confidence: 0.871106386184692

00:06:23.971 --> 00:06:26.698 you line them based on cut off date.
NOTE Confidence: 0.871106386184692

00:06:26.700 --> 00:06:29.367 You see a very similar pattern where
NOTE Confidence: 0.871106386184692

00:06:29.367 --> 00:06:32.090 kids are most likely to be diagnosed
NOTE Confidence: 0.871106386184692

00:06:32.090 --> 00:06:34.742 with ADHD and have an odds ratio
NOTE Confidence: 0.871106386184692

00:06:34.742 --> 00:06:37.382 of about 1.2 in the in the month.
NOTE Confidence: 0.871106386184692

00:06:37.390 --> 00:06:39.220 Birth month right before the school
NOTE Confidence: 0.871106386184692

00:06:39.220 --> 00:06:41.624 cut off and have the least risk in
NOTE Confidence: 0.871106386184692

00:06:41.624 --> 00:06:43.610 the month after the school cut off.
NOTE Confidence: 0.893462538719177

00:06:45.760 --> 00:06:47.516 Furthermore, another way of
NOTE Confidence: 0.893462538719177

00:06:47.516 --> 00:06:50.718 looking at this is based on your
NOTE Confidence: 0.893462538719177

00:06:50.718 --> 00:06:53.153 likelihood of being diagnosed with
NOTE Confidence: 0.893462538719177

00:06:53.153 --> 00:06:55.899 ADHD or being treated for ADHD.

NOTE Confidence: 0.893462538719177

00:06:55.900 --> 00:06:58.666 If you were born 120 days,

NOTE Confidence: 0.893462538719177

00:06:58.670 --> 00:07:01.981 so the four months before this school

NOTE Confidence: 0.893462538719177

00:07:01.981 --> 00:07:05.132 cut off first is 120 days after

NOTE Confidence: 0.893462538719177

00:07:05.132 --> 00:07:08.653 the school cut off and you see the

NOTE Confidence: 0.893462538719177

00:07:08.653 --> 00:07:11.575 odds of being diagnosed with ADHD,

NOTE Confidence: 0.893462538719177

00:07:11.580 --> 00:07:15.276 the odds ratio is about one point 1.38.

NOTE Confidence: 0.893462538719177

00:07:15.280 --> 00:07:17.744 If you were born in the 120

NOTE Confidence: 0.893462538719177

00:07:17.744 --> 00:07:19.460 days before the school,

NOTE Confidence: 0.893462538719177

00:07:19.460 --> 00:07:21.360 cut off rather than 120

NOTE Confidence: 0.893462538719177

00:07:21.360 --> 00:07:22.880 days after the school,

NOTE Confidence: 0.893462538719177

00:07:22.880 --> 00:07:25.920 cut off date and so that's associated with.

NOTE Confidence: 0.893462538719177

00:07:25.920 --> 00:07:29.595 So being younger is associated with a

NOTE Confidence: 0.893462538719177

00:07:29.595 --> 00:07:32.308 fairly substantial increase risk of ADHD.

NOTE Confidence: 0.893462538719177

00:07:32.310 --> 00:07:35.150 And if you look at this heat map,

NOTE Confidence: 0.893462538719177

00:07:35.150 --> 00:07:37.614 which looks at how the odds ratio

NOTE Confidence: 0.893462538719177

00:07:37.614 --> 00:07:40.184 depends on when you set the the
NOTE Confidence: 0.893462538719177

00:07:40.184 --> 00:07:42.338 interval time before and after you
NOTE Confidence: 0.893462538719177

00:07:42.418 --> 00:07:44.446 see that the closer the interval
NOTE Confidence: 0.893462538719177

00:07:44.446 --> 00:07:46.877 time is to the cut off date,
NOTE Confidence: 0.893462538719177

00:07:46.877 --> 00:07:49.710 the higher the odds ratio of 80 HD.
NOTE Confidence: 0.893462538719177

00:07:49.710 --> 00:07:52.150 So if you're born in the 30 days
NOTE Confidence: 0.893462538719177

00:07:52.150 --> 00:07:54.222 before the school cut off compared
NOTE Confidence: 0.893462538719177

00:07:54.222 --> 00:07:56.810 to 30 days after the odds ratios
NOTE Confidence: 0.893462538719177

00:07:56.810 --> 00:07:58.940 approximated to be about 1.5,
NOTE Confidence: 0.893462538719177

00:07:58.940 --> 00:08:00.710 meaning that you're about 50%,
NOTE Confidence: 0.893462538719177

00:08:00.710 --> 00:08:03.490 you have about a 50%.
NOTE Confidence: 0.893462538719177

00:08:03.490 --> 00:08:05.014 Higher likelihood of being
NOTE Confidence: 0.893462538719177

00:08:05.014 --> 00:08:06.157 diagnosed with ADHD.
NOTE Confidence: 0.893462538719177

00:08:06.160 --> 00:08:09.191 If you were born in the month
NOTE Confidence: 0.893462538719177

00:08:09.191 --> 00:08:11.914 before the school cut off date
NOTE Confidence: 0.893462538719177

00:08:11.914 --> 00:08:14.560 as opposed to the month after.

NOTE Confidence: 0.893462538719177

00:08:14.560 --> 00:08:17.661 And into the bottom line is hopefully

NOTE Confidence: 0.893462538719177

00:08:17.661 --> 00:08:21.389 first of all that I convinced you that.

NOTE Confidence: 0.893462538719177

00:08:21.390 --> 00:08:23.560 Your astral astrological sign is

NOTE Confidence: 0.893462538719177

00:08:23.560 --> 00:08:26.160 associated with your risk for ADHD,

NOTE Confidence: 0.893462538719177

00:08:26.160 --> 00:08:29.600 but that the month of your birth is

NOTE Confidence: 0.893462538719177

00:08:29.600 --> 00:08:32.259 strongly associated with your risk of

NOTE Confidence: 0.893462538719177

00:08:32.259 --> 00:08:34.839 being diagnosed and treated for ADHD.

NOTE Confidence: 0.893462538719177

00:08:34.840 --> 00:08:37.738 And this then the relationship is really

NOTE Confidence: 0.893462538719177

00:08:37.738 --> 00:08:40.438 defined by the school entrance cut

NOTE Confidence: 0.893462538719177

00:08:40.438 --> 00:08:43.960 off for the particular location you lived in.

NOTE Confidence: 0.893462538719177

00:08:43.960 --> 00:08:46.130 There's evidence that the affect

NOTE Confidence: 0.893462538719177

00:08:46.130 --> 00:08:48.300 re creases with increasing age,

NOTE Confidence: 0.893462538719177

00:08:48.300 --> 00:08:51.394 in that the odds ratio for treatment.

NOTE Confidence: 0.893462538719177

00:08:51.400 --> 00:08:53.386 But not diagnosis gets less as

NOTE Confidence: 0.893462538719177

00:08:53.386 --> 00:08:55.775 the kids get older so that this

NOTE Confidence: 0.893462538719177

00:08:55.775 --> 00:08:57.761 affect someone goes away as kids
NOTE Confidence: 0.893462538719177

00:08:57.761 --> 00:08:59.988 get further advanced in school.
NOTE Confidence: 0.893462538719177

00:08:59.990 --> 00:09:02.270 It's also clear that the effect
NOTE Confidence: 0.893462538719177

00:09:02.270 --> 00:09:04.504 is fairly substantial if you look
NOTE Confidence: 0.893462538719177

00:09:04.504 --> 00:09:06.436 at the the four months prior,
NOTE Confidence: 0.893462538719177

00:09:06.440 --> 00:09:08.588 the odds ratio is a little
NOTE Confidence: 0.893462538719177

00:09:08.588 --> 00:09:10.020 more than 1/3 higher,
NOTE Confidence: 0.893462538719177

00:09:10.020 --> 00:09:12.168 and if you estimate the month
NOTE Confidence: 0.893462538719177

00:09:12.168 --> 00:09:13.957 before it's about 50% higher,
NOTE Confidence: 0.893462538719177

00:09:13.957 --> 00:09:16.456 so this is quite a substantial risk,
NOTE Confidence: 0.893462538719177

00:09:16.460 --> 00:09:18.632 and I think this has significant
NOTE Confidence: 0.893462538719177

00:09:18.632 --> 00:09:20.400 implications for first of all,
NOTE Confidence: 0.893462538719177

00:09:20.400 --> 00:09:22.608 biological studies of children with ADHD.
NOTE Confidence: 0.893462538719177

00:09:22.610 --> 00:09:25.040 So that the important biological marker
NOTE Confidence: 0.893462538719177

00:09:25.040 --> 00:09:28.394 may not be your brain development compared
NOTE Confidence: 0.893462538719177

00:09:28.394 --> 00:09:31.154 to your actual chronological age,

NOTE Confidence: 0.893462538719177
00:09:31.160 --> 00:09:33.540 but it's what you're expected.
NOTE Confidence: 0.893462538719177
00:09:33.540 --> 00:09:36.858 Age is supposed to be in school.
NOTE Confidence: 0.893462538719177
00:09:36.860 --> 00:09:40.115 It also has profound implications for early
NOTE Confidence: 0.893462538719177
00:09:40.115 --> 00:09:42.559 childhood education and public policy,
NOTE Confidence: 0.893462538719177
00:09:42.560 --> 00:09:45.080 so Paul's doing great in school
NOTE Confidence: 0.893462538719177
00:09:45.080 --> 00:09:48.631 now we held both him and Sam back
NOTE Confidence: 0.893462538719177
00:09:48.631 --> 00:09:51.307 a year before they repeat repeated
NOTE Confidence: 0.893462538719177
00:09:51.397 --> 00:09:54.457 kindergarten at a different school.
NOTE Confidence: 0.893462538719177
00:09:54.460 --> 00:09:55.672 But then.
NOTE Confidence: 0.893462538719177
00:09:55.672 --> 00:09:58.096 That decision is significant
NOTE Confidence: 0.893462538719177
00:09:58.096 --> 00:09:59.308 financial implications,
NOTE Confidence: 0.893462538719177
00:09:59.310 --> 00:10:01.330 you know probably cost.
NOTE Confidence: 0.893462538719177
00:10:01.330 --> 00:10:03.350 I estimated about \$36,000.
NOTE Confidence: 0.893462538719177
00:10:03.350 --> 00:10:06.822 The decision to have the kids stay
NOTE Confidence: 0.893462538719177
00:10:06.822 --> 00:10:09.929 at home for an extra year.
NOTE Confidence: 0.893462538719177

00:10:09.930 --> 00:10:12.475 It's actually probably much more
NOTE Confidence: 0.893462538719177

00:10:12.475 --> 00:10:15.020 than that and and clearly.
NOTE Confidence: 0.893462538719177

00:10:15.020 --> 00:10:16.680 Kids from more advantage
NOTE Confidence: 0.893462538719177

00:10:16.680 --> 00:10:19.170 households have more of an ability
NOTE Confidence: 0.871772348880768

00:10:19.240 --> 00:10:21.304 to delay the start of schooling
NOTE Confidence: 0.871772348880768

00:10:21.304 --> 00:10:23.214 and that may have significant
NOTE Confidence: 0.871772348880768

00:10:23.214 --> 00:10:25.499 effects over the long term.
NOTE Confidence: 0.871772348880768

00:10:25.500 --> 00:10:28.044 It also just emphasizes again the
NOTE Confidence: 0.871772348880768

00:10:28.044 --> 00:10:29.740 importance of school readiness
NOTE Confidence: 0.871772348880768

00:10:29.813 --> 00:10:31.748 programs that I was, you know,
NOTE Confidence: 0.871772348880768

00:10:31.748 --> 00:10:34.811 I was well aware of Paul and Sam being
NOTE Confidence: 0.871772348880768

00:10:34.811 --> 00:10:37.586 behind before they started kindergarten.
NOTE Confidence: 0.871772348880768

00:10:37.590 --> 00:10:40.278 This definitely affected how we treated
NOTE Confidence: 0.871772348880768

00:10:40.278 --> 00:10:43.468 them in school and probably part of
NOTE Confidence: 0.871772348880768

00:10:43.468 --> 00:10:46.096 the reason why they're doing well.
NOTE Confidence: 0.871772348880768

00:10:46.100 --> 00:10:48.830 So I wanted to thank you for

NOTE Confidence: 0.871772348880768

00:10:48.830 --> 00:10:51.418 listening and hope you come to you.