WEBVTT

NOTE duration:"01:07:23"

NOTE recognizability:0.830

NOTE language:en-us

NOTE Confidence: 0.608199006666667
00:00:00.000 --> 00:00:04.704 To get started. Remind you of our

NOTE Confidence: 0.608199006666667

00:00:04.704 --> 00:00:06.530 presentation next week and that is

NOTE Confidence: 0.608199006666667

00:00:06.530 --> 00:00:08.185 by Elizabeth Peacock Chambers and

NOTE Confidence: 0.608199006666667

00:00:08.185 --> 00:00:10.645 her talk will be parents in recovery

NOTE Confidence: 0.608199006666667

00:00:10.645 --> 00:00:12.256 from substance use disorders,

NOTE Confidence: 0.608199006666667

00:00:12.256 --> 00:00:13.053 adaptation, implementation,

NOTE Confidence: 0.608199006666667

00:00:13.053 --> 00:00:15.594 research of mothering from the inside out.

NOTE Confidence: 0.90466447

00:00:18.040 --> 00:00:20.370 And now I'd like to introduce my

NOTE Confidence: 0.90466447

00:00:20.370 --> 00:00:22.272 dear colleague and friend, and friend

NOTE Confidence: 0.90466447

00:00:22.272 --> 00:00:25.338 of the center, Dr Pasco Fearon.

NOTE Confidence: 0.90466447

00:00:25.340 --> 00:00:28.094 I've known and collaborated with with

NOTE Confidence: 0.90466447

00:00:28.094 --> 00:00:31.319 Doctor Fearon for probably close to 15 years,

NOTE Confidence: 0.90466447

00:00:31.320 --> 00:00:33.798 and it seems like just yesterday.

NOTE Confidence: 0.90466447

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00:00:33.800 --> 00:00:37.920 So Pasco is recently the professor of Family

NOTE Confidence: 0.90466447

00:00:37.920 --> 00:00:41.620 research at the University of Cambridge.

NOTE Confidence: 0.90466447

00:00:41.620 --> 00:00:44.760 Because, you know, hello.

NOTE Confidence: 0.90466447

00:00:44.760 --> 00:00:46.788 He specializes in understanding early life

NOTE Confidence: 0.90466447

00:00:46.788 --> 00:00:48.760 determinants of healthy child development.

NOTE Confidence: 0.90466447

00:00:48.760 --> 00:00:50.560 His work focuses particularly on the

NOTE Confidence: 0.90466447

00:00:50.560 --> 00:00:52.550 role of child parent relationships,

NOTE Confidence: 0.90466447

00:00:52.550 --> 00:00:54.030 including attachment and caregiving,

NOTE Confidence: 0.90466447

00:00:54.030 --> 00:00:55.880 the interactions between social and

NOTE Confidence: 0.90466447

00:00:55.880 --> 00:00:58.056 genetic processes, and early development.

NOTE Confidence: 0.90466447

00:00:58.056 --> 00:01:01.356 He leads the children of the 2020 birth

NOTE Confidence: 0.90466447

00:01:01.356 --> 00:01:04.180 Cohort study in England and corrects the UK

NOTE Confidence: 0.90466447

00:01:04.250 --> 00:01:06.680 wide early life Cohort feasibility study.

NOTE Confidence: 0.90466447

00:01:06.680 --> 00:01:08.515 He also conducts extensive research

NOTE Confidence: 0.90466447

00:01:08.515 --> 00:01:09.983 predominantly with parents and

NOTE Confidence: 0.90466447

00:01:09.983 --> 00:01:11.785 young children in both the UK and

NOTE Confidence: 0.90466447

00:01:11.785 --> 00:01:13.629 in low and middle income countries,

NOTE Confidence: 0.90466447

00:01:13.630 --> 00:01:16.020 leveraging and nurturing care framework

NOTE Confidence: 0.90466447

00:01:16.020 --> 00:01:18.410 to promote child developmental outcomes.

NOTE Confidence: 0.90466447

00:01:18.410 --> 00:01:19.900 So without further ado,

NOTE Confidence: 0.90466447

00:01:19.900 --> 00:01:21.640 I give you doctor Pasco Ophira.

NOTE Confidence: 0.5980545

00:01:24.820 --> 00:01:25.210 Mike.

NOTE Confidence: 0.900587945

00:01:28.370 --> 00:01:32.004 Thanks. Thanks very much. Just make

NOTE Confidence: 0.900587945

00:01:32.004 --> 00:01:34.293 sure I have the tech working here.

NOTE Confidence: 0.80855696

00:01:37.940 --> 00:01:39.260 Seems to be working.

NOTE Confidence: 0.17765436

00:01:41.560 --> 00:01:41.920 That.

NOTE Confidence: 0.841926595714286

00:01:44.780 --> 00:01:46.957 And do you see what I see?

NOTE Confidence: 0.841926595714286

00:01:46.960 --> 00:01:49.296 Yes, you do. Great.

NOTE Confidence: 0.841926595714286

00:01:49.296 --> 00:01:51.260 So thank you Mike for that,

NOTE Confidence: 0.841926595714286

00:01:51.260 --> 00:01:52.409 for that introduction.

NOTE Confidence: 0.841926595714286

00:01:52.409 --> 00:01:54.955 Yeah, this is, I don't know,

NOTE Confidence: 0.841926595714286

00:01:54.955 --> 00:01:57.745 I guess this is pretty it's

NOTE Confidence: 0.841926595714286

00:01:57.745 --> 00:01:59.132 becoming a significant for you

NOTE Confidence: 0.841926595714286

00:01:59.132 --> 00:02:00.596 that you're starting to come back

NOTE Confidence: 0.841926595714286

00:02:00.596 --> 00:02:02.237 and reconnect with each other as

NOTE Confidence: 0.841926595714286

00:02:02.237 --> 00:02:03.587 an academic and clinical community

NOTE Confidence: 0.841926595714286

00:02:03.631 --> 00:02:04.957 here at the CHILD Study Center.

NOTE Confidence: 0.841926595714286

00:02:04.960 --> 00:02:06.724 For me, I mean it really is a huge

NOTE Confidence: 0.841926595714286

00:02:06.724 --> 00:02:08.623 one because I had a long association

NOTE Confidence: 0.841926595714286

00:02:08.623 --> 00:02:10.394 with the CHILD Study Center through

NOTE Confidence: 0.841926595714286

00:02:10.394 --> 00:02:12.254 Linda and through my control calendar

NOTE Confidence: 0.841926595714286

00:02:12.254 --> 00:02:14.720 and and arissa and Lois and and.

NOTE Confidence: 0.841926595714286

00:02:14.720 --> 00:02:16.778 That's been a pretty much a constant

NOTE Confidence: 0.841926595714286

00:02:16.778 --> 00:02:18.880 for me in the last 15 years.

NOTE Confidence: 0.841926595714286

00:02:18.880 --> 00:02:20.120 And although it's always been

NOTE Confidence: 0.841926595714286

00:02:20.120 --> 00:02:21.112 a little bit intermittent,

NOTE Confidence: 0.841926595714286

00:02:21.120 --> 00:02:24.128 it's it to me it's been unshakeable and

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NOTE Confidence: 0.841926595714286

00:02:24.128 --> 00:02:26.942 a source of inspiration and wonderful

NOTE Confidence: 0.841926595714286

00:02:26.942 --> 00:02:29.906 collaborations and and fun and and

NOTE Confidence: 0.841926595714286

00:02:29.989 --> 00:02:32.497 creativity and it's just for me,

NOTE Confidence: 0.841926595714286

00:02:32.500 --> 00:02:33.580 it's wonderful to be back.

NOTE Confidence: 0.841926595714286

00:02:33.580 --> 00:02:35.896 So thank you to the organizing committee

NOTE Confidence: 0.841926595714286

00:02:35.896 --> 00:02:38.840 of the grand rounds for making this happen.

NOTE Confidence: 0.841926595714286

00:02:38.840 --> 00:02:40.254 Really, it's been too long and I'm,

NOTE Confidence: 0.841926595714286

00:02:40.260 --> 00:02:40.636 I'm so,

NOTE Confidence: 0.841926595714286

00:02:40.636 --> 00:02:42.140 so glad to be here with you today.

NOTE Confidence: 0.841926595714286

00:02:42.140 --> 00:02:45.034 So I'm going to be talking about attachment.

NOTE Confidence: 0.841926595714286

00:02:45.034 --> 00:02:47.330 Theory and and research.

NOTE Confidence: 0.841926595714286

00:02:47.330 --> 00:02:49.434 And I'm going to try to do the

NOTE Confidence: 0.841926595714286

00:02:49.434 --> 00:02:49.960 obviously impossible,

NOTE Confidence: 0.841926595714286

00:02:49.960 --> 00:02:51.736 which is to summarize the last

NOTE Confidence: 0.841926595714286

00:02:51.736 --> 00:02:53.670 30 or more years of attachment

NOTE Confidence: 0.841926595714286

00:02:53.670 --> 00:02:56.050 research and try to tell you pretty

NOTE Confidence: 0.841926595714286

00:02:56.050 --> 00:02:58.730 much where we stand on some of

NOTE Confidence: 0.841926595714286

00:02:58.730 --> 00:03:00.242 the major theoretical propositions

NOTE Confidence: 0.841926595714286

00:03:00.250 --> 00:03:01.645 of attachment theory.

NOTE Confidence: 0.841926595714286

00:03:01.645 --> 00:03:06.034 And my big mission is, I guess, twofold.

NOTE Confidence: 0.841926595714286

00:03:06.034 --> 00:03:07.927 One is to.

NOTE Confidence: 0.841926595714286

00:03:07.930 --> 00:03:09.526 Give you a pretty,

NOTE Confidence: 0.841926595714286

00:03:09.526 --> 00:03:11.122 pretty selective Fearon Esque

NOTE Confidence: 0.841926595714286

00:03:11.122 --> 00:03:13.790 synthesis of of where I think the

NOTE Confidence: 0.841926595714286

00:03:13.790 --> 00:03:15.590 whether the literature stands what

NOTE Confidence: 0.841926595714286

00:03:15.658 --> 00:03:17.946 we know and what we don't know yet.

NOTE Confidence: 0.841926595714286

00:03:17.950 --> 00:03:20.533 I unashamedly say that this is a

NOTE Confidence: 0.841926595714286

00:03:20.533 --> 00:03:23.089 fear on esque selective review.

NOTE Confidence: 0.841926595714286

00:03:23.090 --> 00:03:24.114 I can't cover everything,

NOTE Confidence: 0.841926595714286

00:03:24.114 --> 00:03:25.918 but I'll try to impart what I

NOTE Confidence: 0.841926595714286

00:03:25.918 --> 00:03:27.409 feel is my sort of modest amount

00:03:27.409 --> 00:03:28.754 of wisdom that I've accumulated

00:03:28.754 --> 00:03:30.494 at having kind of studied this

00:03:30.494 --> 00:03:32.450 subject for for a long time.

00:03:32.450 --> 00:03:33.968 And then the second bit is,

00:03:33.970 --> 00:03:36.590 is really a kind of a call to arms to to,

00:03:36.590 --> 00:03:37.272 to to.

00:03:37.272 --> 00:03:39.659 Get as many of you interested in

00:03:39.659 --> 00:03:42.023 this topic as possible to engage

00:03:42.023 --> 00:03:43.800 with it and to think about where

00:03:43.800 --> 00:03:45.187 it needs to go because my that

00:03:45.187 --> 00:03:46.547 the take home at the end of this

00:03:46.596 --> 00:03:47.996 will be well we've kind of figured

00:03:47.996 --> 00:03:49.788 a few things out and that's that

00:03:49.788 --> 00:03:50.976 doesn't happen often right.

00:03:50.980 --> 00:03:52.457 But but I think there are some

00:03:52.457 --> 00:03:54.053 things we kind of know and that's

NOTE Confidence: 0.841926595714286

00:03:54.053 --> 00:03:55.827 that's the that's the thing in itself

NOTE Confidence: 0.841926595714286

00:03:55.827 --> 00:03:57.557 within the very young psychological

NOTE Confidence: 0.841926595714286

00:03:57.557 --> 00:03:58.941 sciences broadly conceived that

NOTE Confidence: 0.841926595714286

00:03:58.950 --> 00:04:01.950 there are some things that seem to be

NOTE Confidence: 0.841926595714286

00:04:01.950 --> 00:04:03.642 reasonably settled but there's just

NOTE Confidence: 0.841926595714286

00:04:03.642 --> 00:04:05.840 1000 miles to go before we really

NOTE Confidence: 0.841926595714286

00:04:05.904 --> 00:04:08.039 understand the full phenomenon of.

NOTE Confidence: 0.841926595714286

00:04:08.040 --> 00:04:10.236 Attachment and I guess even more

NOTE Confidence: 0.841926595714286

00:04:10.236 --> 00:04:12.511 importantly how we translate that into

NOTE Confidence: 0.841926595714286

00:04:12.511 --> 00:04:13.999 interventions and social programs

NOTE Confidence: 0.841926595714286

00:04:13.999 --> 00:04:15.878 that really make a difference

NOTE Confidence: 0.841926595714286

00:04:15.878 --> 00:04:17.822 for families in this country and

NOTE Confidence: 0.841926595714286

00:04:17.822 --> 00:04:19.668 and in the rest of the world.

NOTE Confidence: 0.841926595714286

00:04:19.668 --> 00:04:20.970 So that's so that you know,

NOTE Confidence: 0.841926595714286

00:04:20.970 --> 00:04:21.926 my my aim is,

NOTE Confidence: 0.841926595714286

00:04:21.926 --> 00:04:24.390 is in this talk is is not ambitious,

NOTE Confidence: 0.825815709333333

00:04:24.390 --> 00:04:26.280 but what I would like you know us to think

NOTE Confidence: 0.825815709333333

00:04:26.328 --> 00:04:27.948 about is something really ambitious,

NOTE Confidence: 0.825815709333333

00:04:27.950 --> 00:04:30.047 which is the future of this field and all

NOTE Confidence: 0.825815709333333

00:04:30.047 --> 00:04:32.376 the connected fields which are interested

NOTE Confidence: 0.825815709333333

00:04:32.376 --> 00:04:34.788 in the importance of early experience,

NOTE Confidence: 0.825815709333333

00:04:34.790 --> 00:04:37.020 the importance of relationships in

NOTE Confidence: 0.825815709333333

00:04:37.020 --> 00:04:38.804 human development and thriving.

NOTE Confidence: 0.825815709333333

00:04:38.810 --> 00:04:40.818 And how we can use those kinds of

NOTE Confidence: 0.825815709333333

00:04:40.818 --> 00:04:43.120 ideas to support families because I'm,

NOTE Confidence: 0.825815709333333

00:04:43.120 --> 00:04:44.700 of course Cambridge professor

NOTE Confidence: 0.825815709333333

00:04:44.700 --> 00:04:46.484 of Family Research. And that's,

NOTE Confidence: 0.825815709333333

00:04:46.484 --> 00:04:48.563 that's and that's what's on the job

NOTE Confidence: 0.825815709333333

00:04:48.563 --> 00:04:50.269 description is that's what I got to do.

NOTE Confidence: 0.825815709333333

00:04:50.270 --> 00:04:53.424 OK. So to get us going, oops,

NOTE Confidence: 0.825815709333333

00:04:53.424 --> 00:04:56.268 the the wheel of death appears.

NOTE Confidence: 0.825815709333333

00:04:56.270 --> 00:04:58.620 Oh, no, don't do that.

NOTE Confidence: 0.825815709333333

00:04:58.620 --> 00:05:03.058 Hmm, that is not good. So no, it's OK.

NOTE Confidence: 0.825815709333333

00:05:03.058 --> 00:05:03.826 Well there we go.

NOTE Confidence: 0.825815709333333

00:05:03.830 --> 00:05:05.726 It was just, it was just,

NOTE Confidence: 0.825815709333333

00:05:05.730 --> 00:05:07.644 it was just thinking about the

NOTE Confidence: 0.825815709333333

00:05:07.644 --> 00:05:09.921 over the top thing that I just

NOTE Confidence: 0.825815709333333

00:05:09.921 --> 00:05:11.787 said and how it could possibly.

NOTE Confidence: 0.825815709333333

00:05:11.790 --> 00:05:12.447 Before I begin,

NOTE Confidence: 0.825815709333333

00:05:12.447 --> 00:05:13.980 I have a really an amazing group

NOTE Confidence: 0.825815709333333

00:05:14.031 --> 00:05:15.015 of collaborators who've helped

NOTE Confidence: 0.825815709333333

00:05:15.015 --> 00:05:16.491 me do all of this work.

NOTE Confidence: 0.825815709333333

00:05:16.500 --> 00:05:17.208 And they're just,

NOTE Confidence: 0.825815709333333

00:05:17.208 --> 00:05:17.680 they're they're,

NOTE Confidence: 0.825815709333333

00:05:17.680 --> 00:05:19.192 they're pictured here on the screen

NOTE Confidence: 0.825815709333333

00:05:19.192 --> 00:05:20.637 actually won't go through all the

NOTE Confidence: 0.825815709333333

00:05:20.637 --> 00:05:22.016 names but some of them you'll know,

NOTE Confidence: 0.825815709333333

00:05:22.020 --> 00:05:22.990 some of you may not.

NOTE Confidence: 0.825815709333333

00:05:22.990 --> 00:05:24.800 But but perhaps another really

NOTE Confidence: 0.825815709333333

00:05:24.800 --> 00:05:26.909 important message that comes out of

NOTE Confidence: 0.825815709333333

00:05:26.909 --> 00:05:28.789 the work that I've done so far is

NOTE Confidence: 0.825815709333333

00:05:28.789 --> 00:05:30.759 that it's all about collaboration.

NOTE Confidence: 0.825815709333333

00:05:30.760 --> 00:05:31.908 I mean, you know,

NOTE Confidence: 0.825815709333333

00:05:31.908 --> 00:05:33.630 I don't think I've achieved nothing

NOTE Confidence: 0.825815709333333

00:05:33.691 --> 00:05:35.737 except with some support from amazing

NOTE Confidence: 0.825815709333333

00:05:35.737 --> 00:05:38.575 people and and these people in

NOTE Confidence: 0.825815709333333

00:05:38.575 --> 00:05:41.070 particular I'm incredibly indebted to.

NOTE Confidence: 0.825815709333333

00:05:41.070 --> 00:05:43.527 So I wanted to start in a,

NOTE Confidence: 0.825815709333333

00:05:43.530 --> 00:05:44.174 in a,

NOTE Confidence: 0.825815709333333

00:05:44.174 --> 00:05:46.310 in a relatively kind of not going

NOTE Confidence: 0.825815709333333

00:05:46.310 --> 00:05:47.610 into the science at all.

NOTE Confidence: 0.825815709333333

00:05:47.610 --> 00:05:49.602 I kind of want to start by getting

NOTE Confidence: 0.825815709333333

00:05:49.602 --> 00:05:51.420 us fixated on what is this

NOTE Confidence: 0.825815709333333

00:05:51.420 --> 00:05:52.368 thing called attachment.

NOTE Confidence: 0.825815709333333

00:05:52.370 --> 00:05:53.870 I've had lots of really

NOTE Confidence: 0.825815709333333

00:05:53.870 --> 00:05:54.770 wonderful conversations with,

NOTE Confidence: 0.825815709333333

00:05:54.770 --> 00:05:54.957 with,

NOTE Confidence: 0.825815709333333

00:05:54.957 --> 00:05:55.892 with colleagues at the center

NOTE Confidence: 0.825815709333333

00:05:55.892 --> 00:05:57.169 already over the last couple of days.

NOTE Confidence: 0.825815709333333

00:05:57.170 --> 00:05:59.250 And one of the things I've just keeps

NOTE Confidence: 0.825815709333333

00:05:59.250 --> 00:06:01.272 coming up for me is we often run

NOTE Confidence: 0.825815709333333

00:06:01.272 --> 00:06:03.470 the risk in in academic sciences of

NOTE Confidence: 0.825815709333333

00:06:03.538 --> 00:06:05.956 losing touch with our core phenomena.

NOTE Confidence: 0.825815709333333

00:06:05.960 --> 00:06:06.965 And it's really,

NOTE Confidence: 0.825815709333333

00:06:06.965 --> 00:06:08.975 really important that we don't do

NOTE Confidence: 0.825815709333333

00:06:08.975 --> 00:06:10.830 that every time we measure something.

NOTE Confidence: 0.825815709333333

00:06:10.830 --> 00:06:13.070 We abstract it and we lose something

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00:06:13.070 --> 00:06:14.480 really profoundly important that is,

00:06:14.480 --> 00:06:16.880 is is in the essence of that phenomenon.

00:06:16.880 --> 00:06:18.860 And so I always try to say to my students,

00:06:18.860 --> 00:06:19.788 go back to observation,

00:06:19.788 --> 00:06:21.180 remember what it is your study

00:06:21.225 --> 00:06:22.300 and get to know children,

00:06:22.300 --> 00:06:23.520 look at how they work,

00:06:23.520 --> 00:06:25.380 don't just rely on the textbooks.

00:06:25.380 --> 00:06:27.084 You're in an unusual science where

00:06:27.084 --> 00:06:29.320 you can just kind of get your raw

00:06:29.320 --> 00:06:30.576 material all the time, right?

00:06:30.576 --> 00:06:31.872 I think about relations with all

00:06:31.872 --> 00:06:33.273 of you and that's that's actually

00:06:33.273 --> 00:06:34.911 data of a form and we shouldn't

00:06:34.956 --> 00:06:35.780 lose sight of that.

00:06:35.780 --> 00:06:37.572 So I'm going to look at attachment

NOTE Confidence: 0.825815709333333

00:06:37.572 --> 00:06:39.715 and I just want to start by sort

NOTE Confidence: 0.825815709333333

00:06:39.715 --> 00:06:41.430 of reminding you what it is so.

NOTE Confidence: 0.825815709333333

00:06:41.430 --> 00:06:41.979 Here's a video.

NOTE Confidence: 0.825815709333333

00:06:41.979 --> 00:06:43.260 I'm going to start with a species

NOTE Confidence: 0.825815709333333

00:06:43.300 --> 00:06:45.780 that's not our own. This is this is a.

NOTE Confidence: 0.733741085

00:06:48.490 --> 00:06:49.786 Ohh I wonder how this sounds

NOTE Confidence: 0.733741085

00:06:49.786 --> 00:06:50.650 gonna work here actually.

NOTE Confidence: 0.828115690526316

00:06:53.490 --> 00:06:54.770 It may not matter, but if you if

NOTE Confidence: 0.828115690526316

00:06:54.770 --> 00:06:56.166 you're if you know a clever way of

NOTE Confidence: 0.828115690526316

00:06:56.166 --> 00:06:59.310 making the sound work. Ohh should

NOTE Confidence: 0.69801399

00:06:59.320 --> 00:07:01.150 I have more videos with

NOTE Confidence: 0.672169185125

00:07:01.650 --> 00:07:06.194 yeah OK OK shouldn't take long I guess.

NOTE Confidence: 0.672169185125

00:07:06.200 --> 00:07:08.727 So share and then where's the ohh.

NOTE Confidence: 0.672169185125

00:07:08.730 --> 00:07:10.495 I see? Brilliant. Thank you, thank you.

NOTE Confidence: 0.672169185125

00:07:10.495 --> 00:07:12.070 OK, yeah, that sounds good.

NOTE Confidence: 0.672169185125

00:07:12.070 --> 00:07:15.510 Actually, it's kind of cute. Oh.

NOTE Confidence: 0.86836147

00:07:18.550 --> 00:07:22.763 Multitasking. OK, so here's an

NOTE Confidence: 0.86836147

00:07:22.763 --> 00:07:24.247 example of attachment behavior,

NOTE Confidence: 0.86836147

00:07:24.250 --> 00:07:25.858 or something pretty similar to it.

NOTE Confidence: 0.75948192

00:07:30.970 --> 00:07:33.122 Still coming through here?

NOTE Confidence: 0.75948192

00:07:33.122 --> 00:07:34.736 It doesn't matter.

NOTE Confidence: 0.75948192

00:07:34.740 --> 00:07:35.990 Microphones too close to the

NOTE Confidence: 0.75948192

00:07:35.990 --> 00:07:38.310 speakers on you. OK, it's fine.

NOTE Confidence: 0.75948192

00:07:38.310 --> 00:07:39.916 It doesn't matter, it's fine.

NOTE Confidence: 0.75948192

00:07:39.916 --> 00:07:43.940 So this is a little a little lamb.

NOTE Confidence: 0.75948192

00:07:43.940 --> 00:07:47.316 He's been reared by humans and it's come.

NOTE Confidence: 0.75948192

00:07:47.320 --> 00:07:49.544 It's it's that big moment in this little

NOTE Confidence: 0.75948192

00:07:49.544 --> 00:07:51.870 lambs life where he's got to go out and

NOTE Confidence: 0.75948192

00:07:51.870 --> 00:07:54.077 fend for himself and be a member of of his,

NOTE Confidence: 0.75948192

00:07:54.080 --> 00:07:56.060 his, his sheep community.

NOTE Confidence: 0.75948192

00:07:56.060 --> 00:07:59.515 And you can see how enthusiastic he

NOTE Confidence: 0.75948192

00:07:59.515 --> 00:08:02.280 is with that idea with this video.

NOTE Confidence: 0.75948192

00:08:02.280 --> 00:08:03.315 Off he goes.

NOTE Confidence: 0.75948192

00:08:03.315 --> 00:08:05.040 Is placed there and attachment

NOTE Confidence: 0.75948192

00:08:05.040 --> 00:08:07.099 is has something to say about

NOTE Confidence: 0.75948192

00:08:07.099 --> 00:08:09.043 how this is going to go.

NOTE Confidence: 0.645241432857143

00:08:16.110 --> 00:08:17.326 And he's called sprouty.

NOTE Confidence: 0.645241432857143

00:08:17.326 --> 00:08:19.316 I don't know. I don't find that

NOTE Confidence: 0.645241432857143

00:08:19.316 --> 00:08:20.930 very cute that he's called sprouty.

NOTE Confidence: 0.645241432857143

00:08:20.930 --> 00:08:23.520 And so sprouty is clearly developed some

NOTE Confidence: 0.645241432857143

00:08:23.520 --> 00:08:25.354 fairly significant and profound attachment

NOTE Confidence: 0.645241432857143

00:08:25.354 --> 00:08:27.986 to this caregiver who is not even of

NOTE Confidence: 0.645241432857143

00:08:28.050 --> 00:08:30.108 the same species as he accused him.

NOTE Confidence: 0.645241432857143

00:08:30.110 --> 00:08:31.586 Which tells you something very interesting,

NOTE Confidence: 0.645241432857143

00:08:31.590 --> 00:08:32.682 right, about the neurobiology

NOTE Confidence: 0.645241432857143

00:08:32.682 --> 00:08:34.047 of this because this is,

NOTE Confidence: 0.645241432857143

00:08:34.050 --> 00:08:35.930 this is something highly preprogrammed,

NOTE Confidence: 0.645241432857143

00:08:35.930 --> 00:08:37.922 clearly. But there's a massive amount

NOTE Confidence: 0.645241432857143

00:08:37.922 --> 00:08:39.905 of learning going on because there's

NOTE Confidence: 0.645241432857143

00:08:39.905 --> 00:08:42.281 no way that humans were much of the.

NOTE Confidence: 0.645241432857143

00:08:42.290 --> 00:08:44.040 Evolutionary history of sheep, right?

NOTE Confidence: 0.645241432857143

00:08:44.040 --> 00:08:46.086 Not much going back at least.

NOTE Confidence: 0.790315814285714

00:08:49.090 --> 00:08:50.630 In in modern societies.

NOTE Confidence: 0.790315814285714

00:08:50.630 --> 00:08:51.785 Here's another example.

NOTE Confidence: 0.790315814285714

00:08:51.790 --> 00:08:54.366 This is actually currently my favorite video.

NOTE Confidence: 0.790315814285714

00:08:54.370 --> 00:08:55.426 This and this doesn't have sound

NOTE Confidence: 0.790315814285714

00:08:55.426 --> 00:08:56.854 so we don't even have to feel like

NOTE Confidence: 0.790315814285714

00:08:56.854 --> 00:08:57.886 we're missing out on the sand.

NOTE Confidence: 0.790315814285714

00:08:57.890 --> 00:09:00.142 But this is an elephant telling friends

NOTE Confidence: 0.790315814285714

00:09:00.142 --> 00:09:02.190 recently that I was in in Kenya recently.

NOTE Confidence: 0.790315814285714

00:09:02.190 --> 00:09:04.310 This is not my own home video by the way.

NOTE Confidence: 0.790315814285714

00:09:04.310 --> 00:09:06.998 I wish it was, but check this out.

NOTE Confidence: 0.790315814285714

00:09:07.000 --> 00:09:09.676 Here's a here's a little toddler,

NOTE Confidence: 0.790315814285714

00:09:09.680 --> 00:09:12.024 I would say elephant.

NOTE Confidence: 0.790315814285714

00:09:12.024 --> 00:09:14.368 And what's he doing?

NOTE Confidence: 0.790315814285714

00:09:14.370 --> 00:09:16.022 Chasing the birds, right?

NOTE Confidence: 0.790315814285714

00:09:16.022 --> 00:09:18.087 What do human toddlers do?

NOTE Confidence: 0.790315814285714

00:09:18.090 --> 00:09:19.250 They chase the birds, right?

NOTE Confidence: 0.790315814285714

00:09:19.250 --> 00:09:20.540 They're going to find this amazing.

NOTE Confidence: 0.871354522

00:09:28.550 --> 00:09:30.270 Isn't that kind of amazing?

NOTE Confidence: 0.871354522

00:09:30.270 --> 00:09:31.250 Now I think you know,

NOTE Confidence: 0.871354522

00:09:31.250 --> 00:09:33.616 I defy anybody to, apart from the

NOTE Confidence: 0.871354522

00:09:33.616 --> 00:09:35.930 presence of a very large trunk,

NOTE Confidence: 0.871354522

00:09:35.930 --> 00:09:38.219 to to see any differences there really

NOTE Confidence: 0.871354522

00:09:38.219 --> 00:09:40.328 between the behavior that we saw there

NOTE Confidence: 0.871354522

00:09:40.328 --> 00:09:42.667 and the behavior you see every day in

NOTE Confidence: 0.871354522

00:09:42.667 --> 00:09:44.707 parks and playgrounds in natural settings.

00:09:44.710 --> 00:09:47.398 That that that this is not

00:09:47.398 --> 00:09:49.334 only isomorphic really with the

00:09:49.334 --> 00:09:52.130 behavior that we see in in humans,

00:09:52.130 --> 00:09:54.626 but it's also the stuff of.

00:09:54.630 --> 00:09:57.566 So many moments in everyday life that matter

00:09:57.566 --> 00:10:00.123 for children and matter for families, right?

00:10:00.123 --> 00:10:01.747 So this is not like a a little

00:10:01.747 --> 00:10:03.219 side project niche topic here.

00:10:03.220 --> 00:10:05.362 This is like the fundamentals of

00:10:05.362 --> 00:10:07.689 much of what happens with young

00:10:07.689 --> 00:10:09.759 children and their parents play,

00:10:09.760 --> 00:10:10.306 by the way,

00:10:10.306 --> 00:10:11.216 because it's a really important

00:10:11.216 --> 00:10:11.980 part of play here.

00:10:11.980 --> 00:10:14.638 He's really enjoying chasing the birds.

00:10:14.640 --> 00:10:16.395 It's just that it goes a bit wrong and

NOTE Confidence: 0.871354522

00:10:16.395 --> 00:10:18.208 he hurts himself and then suddenly

NOTE Confidence: 0.871354522

00:10:18.208 --> 00:10:20.092 players switched off and something else

NOTE Confidence: 0.871354522

00:10:20.092 --> 00:10:21.954 is happening and that's what we call

NOTE Confidence: 0.871354522

00:10:21.954 --> 00:10:24.100 attachment and you can see proximity seeking,

NOTE Confidence: 0.871354522

00:10:24.100 --> 00:10:25.086 highly organized.

NOTE Confidence: 0.871354522

00:10:25.086 --> 00:10:27.058 Very automatic, very smooth,

NOTE Confidence: 0.871354522

00:10:27.060 --> 00:10:29.048 happening kind of effortlessly.

NOTE Confidence: 0.871354522

00:10:29.048 --> 00:10:30.539 And the the,

NOTE Confidence: 0.871354522

00:10:30.540 --> 00:10:33.030 the the young elephant seeks his

NOTE Confidence: 0.871354522

00:10:33.030 --> 00:10:36.247 carer and makes contact and he feels better.

NOTE Confidence: 0.871354522

00:10:36.250 --> 00:10:37.090 I'm pretty sure they don't

NOTE Confidence: 0.871354522

00:10:37.090 --> 00:10:37.930 have the video for this,

NOTE Confidence: 0.871354522

00:10:37.930 --> 00:10:39.685 that he's about to go back and play with

NOTE Confidence: 0.871354522

00:10:39.685 --> 00:10:41.636 the birds more and probably fall over again

NOTE Confidence: 0.871354522

00:10:41.636 --> 00:10:43.476 and she'll have to be there to help him.

NOTE Confidence: 0.871354522

00:10:43.480 --> 00:10:45.840 This is so I find it very fascinating.

NOTE Confidence: 0.871354522

00:10:45.840 --> 00:10:47.821 And I think we forget sometimes just

NOTE Confidence: 0.871354522

00:10:47.821 --> 00:10:49.504 how profoundly rooted in our biology

NOTE Confidence: 0.871354522

00:10:49.504 --> 00:10:51.317 this kind of pattern of behavior must,

NOTE Confidence: 0.871354522

00:10:51.320 --> 00:10:52.144 must be,

NOTE Confidence: 0.871354522

00:10:52.144 --> 00:10:54.616 because it's in almost all mammals,

NOTE Confidence: 0.871354522

00:10:54.620 --> 00:10:55.106 let alone.

NOTE Confidence: 0.871354522

00:10:55.106 --> 00:10:55.592 Prime Minister,

NOTE Confidence: 0.871354522

00:10:55.592 --> 00:10:57.743 the other thing I think is really neat and

NOTE Confidence: 0.871354522

00:10:57.743 --> 00:10:59.904 I just watch it for that reason I'm going to

NOTE Confidence: 0.871354522

00:10:59.904 --> 00:11:02.028 watch it again with you is look at the mum.

NOTE Confidence: 0.871354522

00:11:02.028 --> 00:11:02.500 I was,

NOTE Confidence: 0.871354522

00:11:02.500 --> 00:11:03.310 I was looking at the baby.

NOTE Confidence: 0.871354522

00:11:03.310 --> 00:11:03.850 I don't know about you,

NOTE Confidence: 0.871354522

00:11:03.850 --> 00:11:04.697 but if you look at the mom,

NOTE Confidence: 0.871354522

00:11:04.700 --> 00:11:06.764 she's got one eye.

NOTE Confidence: 0.871354522

00:11:06.764 --> 00:11:09.424 I think it's only on one side of her head.

NOTE Confidence: 0.808569925

00:11:11.810 --> 00:11:14.890 But she's looking there.

NOTE Confidence: 0.808569925

00:11:14.890 --> 00:11:17.109 Now there's something really cool about this.

NOTE Confidence: 0.808569925

00:11:17.110 --> 00:11:19.987 She was already moving before he fell.

NOTE Confidence: 0.808569925

00:11:19.990 --> 00:11:21.938 Did you notice that?

NOTE Confidence: 0.808569925

00:11:21.940 --> 00:11:23.512 This is a good mom, right?

NOTE Confidence: 0.808569925

00:11:23.512 --> 00:11:26.040 She's like. Very attentive.

NOTE Confidence: 0.808569925

00:11:26.040 --> 00:11:27.000 I think she like, you know,

NOTE Confidence: 0.808569925

00:11:27.000 --> 00:11:28.680 and I joked that she I can already.

NOTE Confidence: 0.808569925

00:11:28.680 --> 00:11:29.130 I can almost.

NOTE Confidence: 0.808569925

00:11:29.130 --> 00:11:30.180 If you're going to have like a

NOTE Confidence: 0.808569925

00:11:30.219 --> 00:11:31.207 caption competition for this,

NOTE Confidence: 0.808569925

00:11:31.210 --> 00:11:33.436 it's like you're gonna hurt yourself.

NOTE Confidence: 0.808569925

00:11:33.440 --> 00:11:37.080 I don't. I'm not going to say I told you so.

NOTE Confidence: 0.808569925

00:11:37.080 --> 00:11:38.100 Look, she sees.

NOTE Confidence: 0.808569925

00:11:38.100 --> 00:11:40.740 She's like ohh, she can tell he's actually

NOTE Confidence: 0.808569925

00:11:40.740 --> 00:11:43.440 taking that corner too fast, I think,

NOTE Confidence: 0.808569925

00:11:43.440 --> 00:11:46.140 and my anthropomorphizing too much,

NOTE Confidence: 0.808569925

00:11:46.140 --> 00:11:47.324 maybe, but maybe not.

NOTE Confidence: 0.808569925

00:11:47.324 --> 00:11:49.100 There's a there's she knows a

NOTE Confidence: 0.808569925

00:11:49.161 --> 00:11:51.016 lot about what's happening here,

NOTE Confidence: 0.808569925

00:11:51.020 --> 00:11:52.072 and she's paying attention.

NOTE Confidence: 0.808569925

00:11:52.072 --> 00:11:53.387 She's doing other things too,

NOTE Confidence: 0.808569925

00:11:53.390 --> 00:11:54.540 but there's a level of

NOTE Confidence: 0.808569925

00:11:54.540 --> 00:11:55.460 attention that she's paying,

NOTE Confidence: 0.808569925

00:11:55.460 --> 00:11:57.446 which is about making sure that

NOTE Confidence: 0.808569925

00:11:57.446 --> 00:11:59.620 he's safe and being ready to to

NOTE Confidence: 0.808569925

00:11:59.620 --> 00:12:01.481 be there and initiate caregiving

NOTE Confidence: 0.808569925

00:12:01.481 --> 00:12:04.163 when when it's when it's required.

NOTE Confidence: 0.808569925

00:12:04.170 --> 00:12:06.870 In this case, it was.

NOTE Confidence: 0.808569925

00:12:06.870 --> 00:12:09.288 So that's that's attachment in animals.

NOTE Confidence: 0.808569925

00:12:09.290 --> 00:12:11.110 Here's a couple of examples

NOTE Confidence: 0.808569925

00:12:11.110 --> 00:12:12.566 of attachment in humans.

NOTE Confidence: 0.808569925

00:12:12.570 --> 00:12:13.850 So here's a video.

NOTE Confidence: 0.808569925

00:12:13.850 --> 00:12:15.754 This would maybe actually, do you know what?

NOTE Confidence: 0.808569925

00:12:15.754 --> 00:12:16.690 This is better without the sound,

NOTE Confidence: 0.808569925

00:12:16.690 --> 00:12:18.050 because with the sound is

NOTE Confidence: 0.808569925

00:12:18.050 --> 00:12:18.866 actually too emotional.

NOTE Confidence: 0.808569925

00:12:18.870 --> 00:12:20.600 I'll probably get choked up,

NOTE Confidence: 0.808569925

00:12:20.600 --> 00:12:22.160 but this is a kid whose dad has

NOTE Confidence: 0.808569925

00:12:22.211 --> 00:12:23.416 been deployed in the military

NOTE Confidence: 0.808569925

00:12:23.416 --> 00:12:24.621 for quite a long time.

NOTE Confidence: 0.808569925

00:12:24.630 --> 00:12:29.410 He's not seen his dad for six months or so.

NOTE Confidence: 0.808569925

00:12:29.410 --> 00:12:30.866 And he's playing football.

NOTE Confidence: 0.808569925

00:12:30.866 --> 00:12:31.958 He's playing soccer.

NOTE Confidence: 0.808569925

00:12:31.960 --> 00:12:33.540 And he just suddenly realizes,

NOTE Confidence: 0.808569925

00:12:33.540 --> 00:12:33.936 Oh my God,

NOTE Confidence: 0.808569925

00:12:33.936 --> 00:12:34.464 this is my dad.

NOTE Confidence: 0.786263575

00:12:37.580 --> 00:12:39.520 Look at the speed you could move.

NOTE Confidence: 0.809183586666667

00:12:45.300 --> 00:12:46.188 Yeah, and it.

NOTE Confidence: 0.88201142

00:12:49.310 --> 00:12:51.070 You see how long he hangs on it?

NOTE Confidence: 0.88201142

00:12:51.070 --> 00:12:53.776 I mean, this is, you know.

NOTE Confidence: 0.88201142

00:12:53.780 --> 00:12:55.860 There's a lot of something going on in

NOTE Confidence: 0.88201142

00:12:55.860 --> 00:12:57.512 in that, in that interaction, actually.

NOTE Confidence: 0.88201142

00:12:57.512 --> 00:12:59.210 What you can't hear in that

NOTE Confidence: 0.88201142

00:12:59.260 --> 00:13:00.478 video is the mom is take.

NOTE Confidence: 0.88201142

00:13:00.480 --> 00:13:01.803 You can hear her because she's recording

NOTE Confidence: 0.88201142

00:13:01.803 --> 00:13:03.356 it and the mom is surprised and she

NOTE Confidence: 0.88201142

00:13:03.356 --> 00:13:04.773 actually kind of laughs at one point

NOTE Confidence: 0.88201142

00:13:04.773 --> 00:13:06.665 because she's like, what's the matter?

NOTE Confidence: 0.88201142

00:13:06.665 --> 00:13:08.325 It's just your dad.

NOTE Confidence: 0.88201142

00:13:08.330 --> 00:13:09.870 Which is an interesting thing in itself.

NOTE Confidence: 0.88201142

00:13:09.870 --> 00:13:11.380 I think adults forget how

NOTE Confidence: 0.88201142

00:13:11.380 --> 00:13:12.588 profound this stuff is.

NOTE Confidence: 0.88201142

00:13:12.590 --> 00:13:14.488 But for that kid, he, you know,

NOTE Confidence: 0.88201142

00:13:14.488 --> 00:13:17.259 like really was so happy to see his dad

NOTE Confidence: 0.88201142

00:13:17.259 --> 00:13:19.401 and needed a major recharge in kind

NOTE Confidence: 0.88201142

00:13:19.401 --> 00:13:22.077 of and really reconnect with his dad.

NOTE Confidence: 0.88201142

00:13:22.080 --> 00:13:23.832 And that's like really,

NOTE Confidence: 0.88201142

00:13:23.832 --> 00:13:25.146 really powerful stuff.

NOTE Confidence: 0.88201142

00:13:25.150 --> 00:13:27.265 And again, so sort of going back to what

NOTE Confidence: 0.88201142

00:13:27.265 --> 00:13:29.907 I said at the beginning and not so long ago,

NOTE Confidence: 0.88201142

00:13:29.910 --> 00:13:30.894 if you don't want,

NOTE Confidence: 0.88201142

00:13:30.894 --> 00:13:32.370 you know this thing about not

NOTE Confidence: 0.88201142

00:13:32.429 --> 00:13:33.557 losing touch with the.

NOTE Confidence: 0.88201142

00:13:33.560 --> 00:13:35.877 Powerful feelings around some of this stuff,

NOTE Confidence: 0.88201142

00:13:35.880 --> 00:13:37.428 the powerful kind of extent to

NOTE Confidence: 0.88201142

00:13:37.428 --> 00:13:39.120 which it's rooted in our biology,

NOTE Confidence: 0.88201142

00:13:39.120 --> 00:13:41.591 and which is rooted within our the

NOTE Confidence: 0.88201142

00:13:41.591 --> 00:13:43.649 way that societies are organized.

NOTE Confidence: 0.88201142

00:13:43.650 --> 00:13:45.550 Easy to lose sight of,

NOTE Confidence: 0.88201142

00:13:45.550 --> 00:13:46.370 maybe good for you.

NOTE Confidence: 0.88201142

00:13:46.370 --> 00:13:48.643 Good for all of us to spend a few

NOTE Confidence: 0.88201142

00:13:48.643 --> 00:13:49.963 occasions watching on YouTube

NOTE Confidence: 0.88201142

00:13:49.963 --> 00:13:51.531 reminding ourselves this this stuff

NOTE Confidence: 0.88201142

00:13:51.531 --> 00:13:53.103 is really powerful if you work.

NOTE Confidence: 0.88201142

00:13:53.110 --> 00:13:55.801 And some of you I'm sure do work with

NOTE Confidence: 0.88201142

00:13:55.801 --> 00:13:58.320 children who have been in the care system.

NOTE Confidence: 0.88201142

00:13:58.320 --> 00:13:59.853 We've all been very disturbed and and

NOTE Confidence: 0.88201142

00:13:59.853 --> 00:14:01.271 worried about kids who've been separated

NOTE Confidence: 0.88201142

00:14:01.271 --> 00:14:02.705 from their parents at the border,

NOTE Confidence: 0.88201142

00:14:02.710 --> 00:14:03.350 for example.

NOTE Confidence: 0.88201142

00:14:03.350 --> 00:14:03.990 This is,

NOTE Confidence: 0.88201142

00:14:03.990 --> 00:14:04.630 you know,

NOTE Confidence: 0.88201142

00:14:04.630 --> 00:14:06.530 those kinds of experiences are

NOTE Confidence: 0.88201142

00:14:06.530 --> 00:14:08.050 challenging the powerful emotions

NOTE Confidence: 0.88201142

00:14:08.050 --> 00:14:10.389 and the powerful biology of these

NOTE Confidence: 0.88201142

00:14:10.389 --> 00:14:11.905 kind of attachment experiences.

NOTE Confidence: 0.88201142

00:14:11.910 --> 00:14:13.570 And again it kind of,

NOTE Confidence: 0.88201142

00:14:13.570 --> 00:14:14.050 you know,

NOTE Confidence: 0.88201142

00:14:14.050 --> 00:14:15.250 society sometimes encourages us not

NOTE Confidence: 0.88201142

00:14:15.250 --> 00:14:16.780 to think too much about that but

NOTE Confidence: 0.88201142

00:14:16.780 --> 00:14:18.401 when you see what was that kid was

NOTE Confidence: 0.88201142

00:14:18.401 --> 00:14:19.691 going through in what was unsure

NOTE Confidence: 0.88201142

00:14:19.691 --> 00:14:20.698 really well functioning family,

NOTE Confidence: 0.88201142

00:14:20.698 --> 00:14:22.402 everything was basically OK and it

NOTE Confidence: 0.88201142

00:14:22.402 --> 00:14:24.012 was totally fine with his mum had

NOTE Confidence: 0.88201142

00:14:24.012 --> 00:14:25.310 just been right from the start,

NOTE Confidence: 0.88201142

00:14:25.310 --> 00:14:26.810 you know, under the best circumstances.

NOTE Confidence: 0.88201142

00:14:26.810 --> 00:14:28.826 That was still like a really profound.

NOTE Confidence: 0.88201142

00:14:28.830 --> 00:14:30.606 Reconnection with this, with his dad.

NOTE Confidence: 0.88201142

00:14:30.610 --> 00:14:31.930 So we're talking about really,

NOTE Confidence: 0.88201142

00:14:31.930 --> 00:14:33.400 really important stuff.

NOTE Confidence: 0.88201142

00:14:33.400 --> 00:14:35.488 And and yeah, this is in,

NOTE Confidence: 0.88201142

00:14:35.488 --> 00:14:36.930 I suppose it's I I don't know.

NOTE Confidence: 0.88201142

00:14:36.930 --> 00:14:38.642 I I suppose I would the reason partly

NOTE Confidence: 0.88201142

00:14:38.642 --> 00:14:40.830 why I'm going on about this is that

NOTE Confidence: 0.88201142

00:14:40.830 --> 00:14:41.970 sometimes attachment research is

NOTE Confidence: 0.88201142

00:14:42.023 --> 00:14:43.859 seen as a little bit of a kind of

NOTE Confidence: 0.88201142

00:14:43.859 --> 00:14:46.326 backwater or a niche subject like niche.

NOTE Confidence: 0.88201142

00:14:46.330 --> 00:14:49.150 This is like we breathe,

NOTE Confidence: 0.88201142

00:14:49.150 --> 00:14:52.030 we walk around, we have attachments.

NOTE Confidence: 0.88201142

00:14:52.030 --> 00:14:53.390 There's not a lot else that we do.

NOTE Confidence: 0.88201142

00:14:53.390 --> 00:14:54.580 I mean we do a few other things.

NOTE Confidence: 0.88201142

00:14:54.580 --> 00:14:55.252 We have jobs.

NOTE Confidence: 0.88201142

00:14:55.252 --> 00:14:56.596 But if you think about what

NOTE Confidence: 0.88201142

00:14:56.596 --> 00:14:57.937 goes on in human societies,

NOTE Confidence: 0.88201142

00:14:57.940 --> 00:14:59.459 Mike and I were talking about this.

NOTE Confidence: 0.88201142

00:14:59.460 --> 00:15:02.259 You just decide you want to go and observe.

NOTE Confidence: 0.88201142

00:15:02.260 --> 00:15:02.864 You know,

NOTE Confidence: 0.88201142

00:15:02.864 --> 00:15:04.374 imagine you're an alien landing

NOTE Confidence: 0.88201142

00:15:04.374 --> 00:15:05.700 from a different planet,

NOTE Confidence: 0.88201142

00:15:05.700 --> 00:15:07.884 and you want to describe how do these

NOTE Confidence: 0.88201142

00:15:07.884 --> 00:15:09.779 humans kind of organize themselves.

NOTE Confidence: 0.88201142

00:15:09.780 --> 00:15:10.935 One of the most striking

NOTE Confidence: 0.88201142

00:15:10.935 --> 00:15:12.090 things you'll see is that

NOTE Confidence: 0.869582768461539

00:15:12.145 --> 00:15:13.554 they would say, I believe,

NOTE Confidence: 0.869582768461539

00:15:13.554 --> 00:15:15.696 is that there are powerful attachments,

NOTE Confidence: 0.869582768461539

00:15:15.700 --> 00:15:17.010 people that have these strong

00:15:17.010 --> 00:15:18.058 connections to each other.

00:15:18.060 --> 00:15:19.122 They're emotional connections,

00:15:19.122 --> 00:15:21.937 and they seem to be really important because

00:15:21.937 --> 00:15:24.145 they go to enormous lengths to kind of.

00:15:24.150 --> 00:15:25.470 Look after those and maintain them

00:15:25.470 --> 00:15:26.990 and they really care for their young

00:15:26.990 --> 00:15:28.550 as well and things like this, right.

00:15:28.550 --> 00:15:30.572 So. So it's a, it's a,

00:15:30.572 --> 00:15:32.609 it's a reminder of just how significant

00:15:32.609 --> 00:15:34.549 these experiences are for children.

00:15:34.550 --> 00:15:36.982 And if we're in the business of trying

00:15:36.982 --> 00:15:38.709 to understand human development,

00:15:38.710 --> 00:15:40.168 attachment is one of the things,

00:15:40.170 --> 00:15:41.346 not the only by any means,

00:15:41.350 --> 00:15:42.806 but one of the things that's right there.

00:15:42.810 --> 00:15:44.706 Central is one of the phenomena

NOTE Confidence: 0.869582768461539

00:15:44.706 --> 00:15:46.990 we have to kind of understand.

NOTE Confidence: 0.869582768461539

00:15:46.990 --> 00:15:49.222 And and then the second reason is that I,

NOTE Confidence: 0.869582768461539

00:15:49.230 --> 00:15:51.430 as I said, I think we tend to,

NOTE Confidence: 0.869582768461539

00:15:51.430 --> 00:15:52.084 I don't know,

NOTE Confidence: 0.869582768461539

00:15:52.084 --> 00:15:53.174 maybe it's because it's clinicians,

NOTE Confidence: 0.869582768461539

00:15:53.180 --> 00:15:54.782 some of this stuff is quite

NOTE Confidence: 0.869582768461539

00:15:54.782 --> 00:15:55.583 troubling for ourselves.

NOTE Confidence: 0.869582768461539

00:15:55.590 --> 00:15:57.550 If we see it working with children

NOTE Confidence: 0.869582768461539

00:15:57.550 --> 00:15:58.838 who've experienced pretty tremendous

NOTE Confidence: 0.869582768461539

00:15:58.838 --> 00:16:00.410 attachment traumas for example,

NOTE Confidence: 0.869582768461539

00:16:00.410 --> 00:16:02.909 that it's hard to process that ourselves.

NOTE Confidence: 0.869582768461539

00:16:02.910 --> 00:16:05.390 And so you know.

NOTE Confidence: 0.869582768461539

00:16:05.390 --> 00:16:06.678 We don't always want to think too

NOTE Confidence: 0.869582768461539

00:16:06.678 --> 00:16:07.881 much about just how powerful that

NOTE Confidence: 0.869582768461539

00:16:07.881 --> 00:16:09.105 stuff is because it's you know,

NOTE Confidence: 0.869582768461539

00:16:09.110 --> 00:16:11.246 it's it's it's hard but it's but that's

NOTE Confidence: 0.869582768461539

00:16:11.246 --> 00:16:12.830 actually that's the reality of the

NOTE Confidence: 0.869582768461539

00:16:12.830 --> 00:16:14.750 human business that we're in folks.

NOTE Confidence: 0.869582768461539

00:16:14.750 --> 00:16:16.086 OK I know you know that I'm going

NOTE Confidence: 0.869582768461539

00:16:16.086 --> 00:16:17.345 to skip this one actually because

NOTE Confidence: 0.869582768461539

00:16:17.345 --> 00:16:18.665 it does depend on the sound.

NOTE Confidence: 0.869582768461539

00:16:18.670 --> 00:16:19.012 OK.

NOTE Confidence: 0.869582768461539

00:16:19.012 --> 00:16:21.750 But here's a here's a human that's in

NOTE Confidence: 0.869582768461539

00:16:21.750 --> 00:16:23.450 the strange situation procedure which

NOTE Confidence: 0.869582768461539

00:16:23.450 --> 00:16:25.400 is the kind of the quintessential tool

NOTE Confidence: 0.869582768461539

00:16:25.400 --> 00:16:27.579 that people have used to say the attachment.

NOTE Confidence: 0.869582768461539

00:16:27.580 --> 00:16:30.528 And again just quick.

NOTE Confidence: 0.869582768461539

00:16:30.530 --> 00:16:31.706 It's not that wrong.

NOTE Confidence: 0.869582768461539

00:16:31.706 --> 00:16:34.335 Just to remind us what that looks like here.

NOTE Confidence: 0.869582768461539

00:16:34.335 --> 00:16:36.000 You kind of would could do with the sound,

NOTE Confidence: 0.869582768461539

00:16:36.000 --> 00:16:37.407 but you can see he's he's distressed,

NOTE Confidence: 0.869582768461539

00:16:37.410 --> 00:16:38.330 his mum's popped out.

NOTE Confidence: 0.795347242857143

00:16:40.380 --> 00:16:44.300 He wouldn't accept comfort from a stranger.

NOTE Confidence: 0.795347242857143

00:16:44.300 --> 00:16:47.529 A very nice stranger, no doubt. And his mom.

NOTE Confidence: 0.745591306666667

00:16:49.920 --> 00:16:52.968 And boom, very quickly he settles.

NOTE Confidence: 0.775403813636364

00:16:55.740 --> 00:16:56.795 He really cuddles in there

NOTE Confidence: 0.775403813636364

00:16:56.795 --> 00:16:58.160 and he's a little bit extra.

NOTE Confidence: 0.775403813636364

00:16:58.160 --> 00:16:59.539 There was a moment when Mom thought

NOTE Confidence: 0.775403813636364

00:16:59.539 --> 00:17:01.058 maybe this is what we've done there.

NOTE Confidence: 0.775403813636364

00:17:01.060 --> 00:17:02.048 And he was like, no, no,

NOTE Confidence: 0.775403813636364

00:17:02.048 --> 00:17:04.826 we're not quite done, little bit more,

NOTE Confidence: 0.775403813636364

00:17:04.826 --> 00:17:06.638 a little bit more contact required.

NOTE Confidence: 0.775403813636364

00:17:06.640 --> 00:17:09.520 And again, so I think to me this,

NOTE Confidence: 0.775403813636364

00:17:09.520 --> 00:17:11.385 this behavior is incredibly rich

NOTE Confidence: 0.775403813636364

00:17:11.385 --> 00:17:13.960 and it's dynamic and it's organized,

NOTE Confidence: 0.775403813636364

00:17:13.960 --> 00:17:14.472 it's patterned.

00:17:14.472 --> 00:17:16.264 Bobby actually did a brilliant job of

00:17:16.264 --> 00:17:18.158 kind of describing this sort of behavior.

00:17:18.160 --> 00:17:19.740 Why is it organized in the way that it is?

00:17:19.740 --> 00:17:20.994 What's his purpose?

00:17:20.994 --> 00:17:22.666 What's his evolutionary function?

00:17:22.670 --> 00:17:25.988 What's it sort of psychological function?

00:17:25.990 --> 00:17:29.206 But we've we've moved like painfully

00:17:29.206 --> 00:17:31.140 slowly in actually furthering

00:17:31.140 --> 00:17:33.658 the science of of that, of that,

00:17:33.658 --> 00:17:36.871 that sort of really interesting complex and

00:17:36.871 --> 00:17:39.976 highly conserved pattern of of behavior.

00:17:39.980 --> 00:17:42.419 So there's just so much more work to do.

00:17:42.420 --> 00:17:45.762 And and I believe that clinicians

00:17:45.762 --> 00:17:47.927 and behavioral neuroscientists and

00:17:47.927 --> 00:17:49.875 anthropologists and psychologists all

00:17:49.875 --> 00:17:51.823 have really important contributions

NOTE Confidence: 0.775403813636364

00:17:51.823 --> 00:17:54.317 to trying to understand this stuff.

NOTE Confidence: 0.775403813636364

00:17:54.320 --> 00:17:56.210 And we don't do and there's not a lot enough.

NOTE Confidence: 0.775403813636364

00:17:56.210 --> 00:17:57.694 Crossover work with animals by the way,

NOTE Confidence: 0.775403813636364

00:17:57.700 --> 00:17:59.372 I mean it's it's so obvious that this

NOTE Confidence: 0.775403813636364

00:17:59.372 --> 00:18:01.095 would this was a very natural and easy

NOTE Confidence: 0.775403813636364

00:18:01.095 --> 00:18:02.898 which we struggle so in so many occasions,

NOTE Confidence: 0.775403813636364

00:18:02.900 --> 00:18:06.855 right to have animal models of something.

NOTE Confidence: 0.775403813636364

00:18:06.860 --> 00:18:08.642 Here we have like the perfect

NOTE Confidence: 0.775403813636364

00:18:08.642 --> 00:18:09.830 animal model or something.

NOTE Confidence: 0.775403813636364

00:18:09.830 --> 00:18:11.590 It is because it's almost

NOTE Confidence: 0.775403813636364

00:18:11.590 --> 00:18:13.350 certainly exactly the same thing.

NOTE Confidence: 0.775403813636364

00:18:13.350 --> 00:18:15.030 Well you know,

NOTE Confidence: 0.775403813636364

00:18:15.030 --> 00:18:16.710 with various caveats.

NOTE Confidence: 0.775403813636364

00:18:16.710 --> 00:18:18.690 So there's a lot we could do that we

NOTE Confidence: 0.775403813636364

00:18:18.690 --> 00:18:20.550 haven't done yet in terms of studying

00:18:20.550 --> 00:18:22.210 the the neurobiology of attachment.

00:18:22.210 --> 00:18:24.136 OK, so that's, that's, that's my,

00:18:24.140 --> 00:18:25.449 that's my little advert at the beginning,

00:18:25.450 --> 00:18:27.256 to get you confused by studying

00:18:27.256 --> 00:18:29.448 attachment and to think of it as as like,

00:18:29.450 --> 00:18:32.210 fundamental to human behavioral sciences.

00:18:32.210 --> 00:18:33.330 Not a niche subject,

00:18:33.330 --> 00:18:34.730 not some branch of psychoanalysis

00:18:34.730 --> 00:18:35.588 like by the way,

00:18:35.590 --> 00:18:36.546 I came to studying.

00:18:36.546 --> 00:18:38.356 Question because I I was a biologist

00:18:38.356 --> 00:18:40.575 and doing work on behavioral ecology of

00:18:40.575 --> 00:18:42.625 animals and so that that's partly why

00:18:42.625 --> 00:18:44.332 there's so many animals in this talk.

00:18:44.332 --> 00:18:46.225 I came at it and it was like I looked

00:18:46.225 --> 00:18:47.961 at psychology and thought a lot of this

NOTE Confidence: 0.775403813636364

00:18:48.009 --> 00:18:49.818 stuff doesn't make a lot of sense to me.

NOTE Confidence: 0.775403813636364

00:18:49.820 --> 00:18:51.212 And then I saw attachment research

NOTE Confidence: 0.775403813636364

00:18:51.212 --> 00:18:52.420 thought well that makes sense,

NOTE Confidence: 0.775403813636364

00:18:52.420 --> 00:18:53.044 that's evolutionary,

NOTE Confidence: 0.775403813636364

00:18:53.044 --> 00:18:53.668 you know,

NOTE Confidence: 0.775403813636364

00:18:53.668 --> 00:18:55.862 plausible and I can see a function

NOTE Confidence: 0.775403813636364

00:18:55.862 --> 00:18:57.440 there and I can see how,

NOTE Confidence: 0.775403813636364

00:18:57.440 --> 00:18:59.095 you know the underlying neurobiology

NOTE Confidence: 0.775403813636364

00:18:59.095 --> 00:19:01.343 of affect and behavior and so on

NOTE Confidence: 0.775403813636364

00:19:01.343 --> 00:19:02.957 would would actually fit with that.

NOTE Confidence: 0.775403813636364

00:19:02.960 --> 00:19:04.178 So it was my first experience of

NOTE Confidence: 0.775403813636364

00:19:04.178 --> 00:19:06.191 a of a sort of a serious bit of

NOTE Confidence: 0.775403813636364

00:19:06.191 --> 00:19:07.431 psychology that looked really well

NOTE Confidence: 0.775403813636364

00:19:07.431 --> 00:19:08.823 informed from the point of view

NOTE Confidence: 0.775403813636364

00:19:08.823 --> 00:19:10.868 of somebody who came at this from

NOTE Confidence: 0.775403813636364

00:19:10.868 --> 00:19:12.890 a from a kind of developmental

NOTE Confidence: 0.775403813636364

00:19:12.962 --> 00:19:15.278 evolutionary biology perspective.

NOTE Confidence: 0.775403813636364

00:19:15.280 --> 00:19:15.475 Yeah.

NOTE Confidence: 0.775403813636364

00:19:15.475 --> 00:19:17.230 So and So what I'm going to do the

NOTE Confidence: 0.775403813636364

00:19:17.284 --> 00:19:18.922 rest of this talk is just take

NOTE Confidence: 0.775403813636364

00:19:18.922 --> 00:19:20.299 you through where I think we've

NOTE Confidence: 0.775403813636364

00:19:20.299 --> 00:19:21.334 got on three of the,

NOTE Confidence: 0.775403813636364

00:19:21.340 --> 00:19:21.753 the,

NOTE Confidence: 0.775403813636364

00:19:21.753 --> 00:19:24.644 the sort of main propositions of the

NOTE Confidence: 0.775403813636364

00:19:24.644 --> 00:19:27.600 theory that that that that sits around

NOTE Confidence: 0.775403813636364

00:19:27.600 --> 00:19:30.300 this phenomenon that we call attachment.

NOTE Confidence: 0.871986748461538

00:19:30.300 --> 00:19:32.541 The first is that so the theory of these

NOTE Confidence: 0.871986748461538

00:19:32.541 --> 00:19:34.119 individual differences in attachment.

NOTE Confidence: 0.871986748461538

00:19:34.120 --> 00:19:36.454 Uh behavior in young children that

NOTE Confidence: 0.871986748461538

00:19:36.454 --> 00:19:39.059 I'm sure you're familiar with that

NOTE Confidence: 0.871986748461538

00:19:39.059 --> 00:19:41.011 those very individual differences

NOTE Confidence: 0.871986748461538

00:19:41.011 --> 00:19:42.963 are in environmentally caused.

NOTE Confidence: 0.871986748461538

00:19:42.970 --> 00:19:44.474 That's that's a that's a that's a theory.

NOTE Confidence: 0.871986748461538

00:19:44.480 --> 00:19:46.160 That's a hypothesis and we'll look

NOTE Confidence: 0.871986748461538

00:19:46.160 --> 00:19:48.008 at how convincing is that evidence

NOTE Confidence: 0.871986748461538

00:19:48.008 --> 00:19:49.688 because there's lots of interesting

NOTE Confidence: 0.871986748461538

00:19:49.688 --> 00:19:51.668 behavior we just saw in that video.

NOTE Confidence: 0.871986748461538

00:19:51.670 --> 00:19:53.272 But is that is that you know if we

NOTE Confidence: 0.871986748461538

00:19:53.272 --> 00:19:55.030 saw children behaving doing that in a

NOTE Confidence: 0.871986748461538

00:19:55.030 --> 00:19:56.900 different way are we sure that that's

NOTE Confidence: 0.871986748461538

00:19:56.900 --> 00:19:58.508 something to do with the environment

NOTE Confidence: 0.871986748461538

00:19:58.508 --> 00:20:00.375 and their caregiving and not something

NOTE Confidence: 0.871986748461538

00:20:00.375 --> 00:20:02.826 to do with them and their genetic

NOTE Confidence: 0.871986748461538

00:20:02.826 --> 00:20:05.214 dispositions and temperaments and so on.

NOTE Confidence: 0.871986748461538

00:20:05.220 --> 00:20:06.396 The second really important

NOTE Confidence: 0.871986748461538

00:20:06.396 --> 00:20:08.160 sort of assertion of of of,

00:20:08.160 --> 00:20:10.512 of the theory around this is that

00:20:10.512 --> 00:20:12.211 attachment styles or patterns are

00:20:12.211 --> 00:20:14.388 laid down in early life and they

00:20:14.388 --> 00:20:16.389 they are very stable over time.

00:20:16.390 --> 00:20:18.577 And they kind of you carry them with you

00:20:18.580 --> 00:20:20.582 even when you're no longer around the

00:20:20.582 --> 00:20:22.434 people directly with the people with

00:20:22.434 --> 00:20:24.004 whom you develop those attachments,

00:20:24.010 --> 00:20:26.596 so that they're stable over time.

00:20:26.600 --> 00:20:28.224 They're internalized as internal

00:20:28.224 --> 00:20:29.036 working models,

00:20:29.040 --> 00:20:31.025 these kind of cognitive affective

00:20:31.025 --> 00:20:33.010 structures that are thought to

00:20:33.075 --> 00:20:35.000 sort of organize your behavior.

00:20:35.000 --> 00:20:36.796 With respect to attachment,

00:20:36.796 --> 00:20:40.297 those are presumed to sort of stay with

NOTE Confidence: 0.871986748461538

00:20:40.297 --> 00:20:43.193 you and they help and make sense of.

NOTE Confidence: 0.871986748461538

00:20:43.200 --> 00:20:45.680 The tendency we believe to be the case,

NOTE Confidence: 0.871986748461538

00:20:45.680 --> 00:20:47.400 or some people believe to be the case,

NOTE Confidence: 0.871986748461538

00:20:47.400 --> 00:20:49.640 that attachment is quite.

NOTE Confidence: 0.871986748461538

00:20:49.640 --> 00:20:51.320 Consistent over time.

NOTE Confidence: 0.871986748461538

00:20:51.320 --> 00:20:52.496 And not only that,

NOTE Confidence: 0.871986748461538

00:20:52.496 --> 00:20:54.260 but it might be transmitted from

NOTE Confidence: 0.871986748461538

00:20:54.322 --> 00:20:55.877 one generation to the next.

NOTE Confidence: 0.871986748461538

00:20:55.880 --> 00:20:57.680 So we'll look at the evidence for that.

NOTE Confidence: 0.871986748461538

00:20:57.680 --> 00:21:00.048 And then finally I guess it really if

NOTE Confidence: 0.871986748461538

00:21:00.048 --> 00:21:01.610 you're interested in mental health,

NOTE Confidence: 0.871986748461538

00:21:01.610 --> 00:21:03.698 which I think all of us here are,

NOTE Confidence: 0.871986748461538

00:21:03.700 --> 00:21:05.578 then the the final question that's

NOTE Confidence: 0.871986748461538

00:21:05.578 --> 00:21:07.688 really important and is in the session

NOTE Confidence: 0.871986748461538

00:21:07.688 --> 00:21:10.139 again of of many people working in this area,

00:21:10.140 --> 00:21:11.748 that attachment is a really important

00:21:11.748 --> 00:21:13.551 part of the puzzle for understanding

00:21:13.551 --> 00:21:15.591 children's well-being in their in their

00:21:15.591 --> 00:21:17.586 mental health and then we're going to

00:21:17.586 --> 00:21:20.320 review the evidence from that too.

00:21:20.320 --> 00:21:20.728 OK,

00:21:20.728 --> 00:21:23.176 so let's look at the environment

00:21:23.176 --> 00:21:24.400 first of all.

00:21:24.400 --> 00:21:24.697 Umm.

00:21:24.697 --> 00:21:27.073 So many of you would probably be aware

00:21:27.073 --> 00:21:29.299 that there's a there has been many,

00:21:29.300 --> 00:21:30.500 many studies over the years,

00:21:30.500 --> 00:21:32.045 starting really with Mary Ainsworth

00:21:32.045 --> 00:21:34.355 seminal work that she began in Uganda and

00:21:34.355 --> 00:21:36.400 then and then took to Baltimore in the US,

00:21:36.400 --> 00:21:37.760 where she was trying to

NOTE Confidence: 0.871986748461538

00:21:37.760 --> 00:21:38.576 understand attachment behavior.

NOTE Confidence: 0.871986748461538

00:21:38.580 --> 00:21:40.225 And she was also trying to understand

NOTE Confidence: 0.871986748461538

00:21:40.225 --> 00:21:41.839 the home based experiences that might

NOTE Confidence: 0.871986748461538

00:21:41.839 --> 00:21:43.834 help her to understand why some children

NOTE Confidence: 0.871986748461538

00:21:43.886 --> 00:21:45.334 seem to show this sort of what we

NOTE Confidence: 0.871986748461538

00:21:45.334 --> 00:21:47.292 call a secure pattern of attachment

NOTE Confidence: 0.871986748461538

00:21:47.292 --> 00:21:51.570 and some children don't and in 1997.

NOTE Confidence: 0.871986748461538

00:21:51.570 --> 00:21:54.324 Dewolf and Van Eisenhorn collected a

NOTE Confidence: 0.871986748461538

00:21:54.324 --> 00:21:57.516 lot of the evidence that have been

NOTE Confidence: 0.871986748461538

00:21:57.516 --> 00:21:59.690 produced to date that had assessed

NOTE Confidence: 0.871986748461538

00:21:59.690 --> 00:22:01.190 some measure of caregiving behavior,

NOTE Confidence: 0.871986748461538

00:22:01.190 --> 00:22:03.326 and in particular this kind of

NOTE Confidence: 0.871986748461538

00:22:03.326 --> 00:22:04.750 construct of sensitivity that

NOTE Confidence: 0.871986748461538

00:22:04.810 --> 00:22:06.590 Mary Ainsworth had identified.

NOTE Confidence: 0.871986748461538

00:22:06.590 --> 00:22:07.856 She believed that that was the

NOTE Confidence: 0.871986748461538

00:22:07.856 --> 00:22:09.250 sort of the key ingredient,

NOTE Confidence: 0.871986748461538

00:22:09.250 --> 00:22:10.465 if you like,

NOTE Confidence: 0.871986748461538

00:22:10.465 --> 00:22:11.680 patterns of parental

NOTE Confidence: 0.871986748461538

00:22:11.680 --> 00:22:13.300 behavior where the parent

NOTE Confidence: 0.806499608461538

00:22:13.369 --> 00:22:14.809 is highly responsive,

NOTE Confidence: 0.806499608461538

00:22:14.810 --> 00:22:16.313 a little bit like the elephant, actually.

NOTE Confidence: 0.806499608461538

00:22:16.313 --> 00:22:18.428 I mean, it's funnily enough,

NOTE Confidence: 0.806499608461538

00:22:18.430 --> 00:22:19.984 Ainsworth will definitely have coded that

NOTE Confidence: 0.806499608461538

00:22:19.984 --> 00:22:21.570 quite highly because she talked about.

NOTE Confidence: 0.806499608461538

00:22:21.570 --> 00:22:23.244 You know attentive level of awareness

NOTE Confidence: 0.806499608461538

00:22:23.244 --> 00:22:25.273 is like the first point the first

NOTE Confidence: 0.806499608461538

00:22:25.273 --> 00:22:26.995 piece of the puzzle of sensitivity.

NOTE Confidence: 0.806499608461538

00:22:27.000 --> 00:22:29.106 Does the parents sort of have a a nascent

NOTE Confidence: 0.806499608461538

00:22:29.106 --> 00:22:31.262 sense of not you know where is my child

NOTE Confidence: 0.806499608461538

00:22:31.262 --> 00:22:32.796 that's that's an important that not

NOTE Confidence: 0.806499608461538

45

00:22:32.796 --> 00:22:36.230 all families you know do that so well.

NOTE Confidence: 0.806499608461538

00:22:36.230 --> 00:22:37.329 But not just where is my child?

NOTE Confidence: 0.806499608461538

00:22:37.330 --> 00:22:38.758 Where are they at right now?

NOTE Confidence: 0.806499608461538

00:22:38.760 --> 00:22:39.858 Are they happy? Are they sad?

NOTE Confidence: 0.806499608461538

00:22:39.860 --> 00:22:41.120 What just happened? How are they feeling?

NOTE Confidence: 0.806499608461538

00:22:41.120 --> 00:22:41.928 What are they thinking?

NOTE Confidence: 0.806499608461538

00:22:41.928 --> 00:22:42.736 What are they into?

NOTE Confidence: 0.806499608461538

00:22:42.740 --> 00:22:44.154 And this doesn't need to be like,

NOTE Confidence: 0.806499608461538

00:22:44.160 --> 00:22:45.200 and usually it isn't like,

NOTE Confidence: 0.806499608461538

00:22:45.200 --> 00:22:46.421 heavy cognitive work.

NOTE Confidence: 0.806499608461538

00:22:46.421 --> 00:22:48.456 This is just a effortless,

NOTE Confidence: 0.806499608461538

00:22:48.460 --> 00:22:50.780 subtle, basic level of awareness.

NOTE Confidence: 0.806499608461538

00:22:50.780 --> 00:22:51.338 Like that elephant,

NOTE Confidence: 0.806499608461538

00:22:51.338 --> 00:22:52.640 they had one eye on the chart

NOTE Confidence: 0.806499608461538

00:22:52.678 --> 00:22:53.928 whilst also doing something else.

NOTE Confidence: 0.806499608461538

00:22:53.930 --> 00:22:55.350 That's awareness is important.

00:22:55.350 --> 00:22:57.898 And then there's a kind of they may

00:22:57.898 --> 00:22:59.570 be aware of the signal of some kind

00:22:59.622 --> 00:23:01.239 that may be important to the baby.

00:23:01.240 --> 00:23:02.780 Are they then responding in some way?

00:23:02.780 --> 00:23:05.055 Is that, is that response fairly timely?

00:23:05.060 --> 00:23:05.648 And most importantly,

00:23:05.648 --> 00:23:07.390 does it seem to be kind of fitting?

00:23:07.390 --> 00:23:08.878 Well, with what the baby seemed to need.

00:23:08.880 --> 00:23:10.300 So if the baby's tired,

00:23:10.300 --> 00:23:12.412 the parents sort of seems to know that

00:23:12.412 --> 00:23:14.296 responds and coaxes the baby to sleep.

00:23:14.300 --> 00:23:15.600 If the baby is distressed

00:23:15.600 --> 00:23:16.380 and hurt themselves,

00:23:16.380 --> 00:23:17.843 they kind of quickly get that and

00:23:17.843 --> 00:23:19.161 provide a response that's soothing and

00:23:19.161 --> 00:23:20.680 helpful in that context and so on.

NOTE Confidence: 0.806499608461538

00:23:20.680 --> 00:23:22.332 And that's the kind of what Mary

NOTE Confidence: 0.806499608461538

00:23:22.332 --> 00:23:23.998 Ainsworth is really getting at when she,

NOTE Confidence: 0.806499608461538

00:23:24.000 --> 00:23:27.004 she mentioned sensitive caregiving

NOTE Confidence: 0.806499608461538

00:23:27.004 --> 00:23:29.184 and in 1997,

NOTE Confidence: 0.806499608461538

00:23:29.184 --> 00:23:33.228 the the correlation across multiple studies.

NOTE Confidence: 0.769140716428572

00:23:35.360 --> 00:23:37.528 Between sensitive caregiving and

NOTE Confidence: 0.769140716428572

00:23:37.528 --> 00:23:39.696 attachment security versus insecurity

NOTE Confidence: 0.769140716428572

00:23:39.696 --> 00:23:42.940 was you know robustly non zero and

NOTE Confidence: 0.769140716428572

00:23:42.940 --> 00:23:45.180 clearly significant and consistent

NOTE Confidence: 0.769140716428572

00:23:45.180 --> 00:23:47.420 largely across these studies.

NOTE Confidence: 0.769140716428572

00:23:47.420 --> 00:23:48.800 It was also pretty small.

NOTE Confidence: 0.769140716428572

00:23:48.800 --> 00:23:50.264 So you can see the correlation

NOTE Confidence: 0.769140716428572

00:23:50.264 --> 00:23:51.665 there is a correlation of .22.

NOTE Confidence: 0.769140716428572

00:23:51.665 --> 00:23:53.090 So it's kind of like.

NOTE Confidence: 0.769140716428572

00:23:53.090 --> 00:23:55.618 Glass is half empty or maybe it's half

NOTE Confidence: 0.769140716428572

00:23:55.618 --> 00:23:57.246 half full, depends how you look at it.

NOTE Confidence: 0.769140716428572

00:23:57.250 --> 00:24:00.010 So yes, clearly an association there,

NOTE Confidence: 0.769140716428572

00:24:00.010 --> 00:24:02.666 but it's not a not a huge association.

NOTE Confidence: 0.769140716428572

00:24:02.670 --> 00:24:04.280 And there's been a lot of kind

NOTE Confidence: 0.769140716428572

00:24:04.280 --> 00:24:05.578 of heartache and puzzling and

NOTE Confidence: 0.769140716428572

00:24:05.578 --> 00:24:07.252 thinking about this like what are

NOTE Confidence: 0.769140716428572

00:24:07.252 --> 00:24:09.430 we missing and and that's not sold,

NOTE Confidence: 0.769140716428572

00:24:09.430 --> 00:24:10.744 we'll come back to this and for a while.

NOTE Confidence: 0.769140716428572

00:24:10.750 --> 00:24:12.311 But actually there's still a lot to

NOTE Confidence: 0.769140716428572

00:24:12.311 --> 00:24:13.824 do in terms of actually understanding

NOTE Confidence: 0.769140716428572

00:24:13.824 --> 00:24:16.198 what are the kind of it, you know,

NOTE Confidence: 0.769140716428572

00:24:16.198 --> 00:24:17.774 assuming they are environmental

NOTE Confidence: 0.769140716428572

00:24:17.774 --> 00:24:19.922 and caregiving drivers of these

NOTE Confidence: 0.769140716428572

00:24:19.922 --> 00:24:21.946 individual differences in attachment.

NOTE Confidence: 0.769140716428572

00:24:21.950 --> 00:24:22.994 We've still got quite a long

NOTE Confidence: 0.769140716428572

00:24:22.994 --> 00:24:24.059 way to pin all of that.

NOTE Confidence: 0.769140716428572

00:24:24.060 --> 00:24:24.366 Yeah.

NOTE Confidence: 0.769140716428572

00:24:24.366 --> 00:24:26.508 And that's really important because so much

NOTE Confidence: 0.769140716428572

00:24:26.508 --> 00:24:29.090 of our intervention work is based on that.

NOTE Confidence: 0.769140716428572

00:24:29.090 --> 00:24:31.178 We just recently completed a A

NOTE Confidence: 0.769140716428572

00:24:31.178 --> 00:24:33.719 kind of grand update of the Van

NOTE Confidence: 0.769140716428572

00:24:33.719 --> 00:24:35.204 Heisendong and Venison Dawn study.

NOTE Confidence: 0.769140716428572

00:24:35.204 --> 00:24:37.669 They at the time there were one that was,

NOTE Confidence: 0.769140716428572

00:24:37.670 --> 00:24:39.014 I mean it's really small if you think

NOTE Confidence: 0.769140716428572

00:24:39.014 --> 00:24:40.449 about it was a really important paper,

NOTE Confidence: 0.769140716428572

00:24:40.450 --> 00:24:43.202 but it was only 1666 participants

NOTE Confidence: 0.769140716428572

00:24:43.202 --> 00:24:45.938 all pulled from lots of different

NOTE Confidence: 0.769140716428572

00:24:45.938 --> 00:24:47.590 studies at the time.

NOTE Confidence: 0.769140716428572

00:24:47.590 --> 00:24:50.694 We now managed to find 159 studies

NOTE Confidence: 0.769140716428572

00:24:50.694 --> 00:24:54.075 that had had assessed this 21,000.

NOTE Confidence: 0.769140716428572

00:24:54.075 --> 00:24:55.735 483 different participants included

NOTE Confidence: 0.769140716428572

00:24:55.735 --> 00:24:58.659 in this kind of much more recent.

NOTE Confidence: 0.769140716428572

00:24:58.660 --> 00:25:01.187 Major update of the evidence based on

NOTE Confidence: 0.769140716428572

00:25:01.187 --> 00:25:02.798 the relationship between caregiving

NOTE Confidence: 0.769140716428572

00:25:02.798 --> 00:25:05.128 and attachment security and security.

NOTE Confidence: 0.870657532666667

00:25:07.250 --> 00:25:08.754 It would have been more fun if the

NOTE Confidence: 0.870657532666667

00:25:08.754 --> 00:25:10.052 answer was like and it's totally

NOTE Confidence: 0.870657532666667

00:25:10.052 --> 00:25:11.940 different folks but it's not I mean it's

NOTE Confidence: 0.870657532666667

00:25:11.940 --> 00:25:13.548 really quite the evidence has remained

NOTE Confidence: 0.870657532666667

00:25:13.548 --> 00:25:15.080 very consistent actually since then.

NOTE Confidence: 0.870657532666667

00:25:15.080 --> 00:25:17.406 So the correlation is now it's crept

NOTE Confidence: 0.870657532666667

00:25:17.406 --> 00:25:19.772 up a little bit which is interesting

NOTE Confidence: 0.870657532666667

00:25:19.772 --> 00:25:22.170 to about .26 but you can see it's

NOTE Confidence: 0.870657532666667

00:25:22.170 --> 00:25:24.030 so it's it remains highly robust.

NOTE Confidence: 0.870657532666667

00:25:24.030 --> 00:25:25.764 I think that's probably important for

NOTE Confidence: 0.870657532666667

00:25:25.764 --> 00:25:28.690 you to to to to to hold on to because

NOTE Confidence: 0.870657532666667

00:25:28.690 --> 00:25:30.416 there are many phenomena that we

NOTE Confidence: 0.870657532666667

00:25:30.416 --> 00:25:32.278 study where the 1st 10 studies seem

NOTE Confidence: 0.870657532666667

00:25:32.278 --> 00:25:34.116 to be wonderful and then you know

NOTE Confidence: 0.870657532666667

00:25:34.116 --> 00:25:35.776 it's called the winners curse and

NOTE Confidence: 0.870657532666667

00:25:35.776 --> 00:25:37.480 then you know actually affects sizes.

NOTE Confidence: 0.870657532666667

00:25:37.480 --> 00:25:39.545 Just decline and decline and you can

NOTE Confidence: 0.870657532666667

00:25:39.545 --> 00:25:41.738 almost see them heading towards the 0.

NOTE Confidence: 0.870657532666667

00:25:41.740 --> 00:25:43.966 This is a phenomenon that is true

NOTE Confidence: 0.870657532666667

00:25:43.966 --> 00:25:45.669 across many branches of science and

NOTE Confidence: 0.870657532666667

00:25:45.669 --> 00:25:48.525 but in the in and in the case of the

NOTE Confidence: 0.870657532666667

00:25:48.525 --> 00:25:50.105 sensitivity to attachment question,

NOTE Confidence: 0.870657532666667

00:25:50.110 --> 00:25:51.120 we're not really seeing that.

NOTE Confidence: 0.870657532666667

00:25:51.120 --> 00:25:54.450 It's pretty consistent and has been

NOTE Confidence: 0.870657532666667

00:25:54.450 --> 00:25:58.658 stable over time with much larger

NOTE Confidence: 0.870657532666667

00:25:58.660 --> 00:26:00.148 with a much larger evidence base.

NOTE Confidence: 0.870657532666667

00:26:00.150 --> 00:26:02.120 The other thing by the way just to point out,

00:26:02.120 --> 00:26:03.700 sorry to go back throughout,

00:26:03.700 --> 00:26:06.116 quite a lot of what I'm describing here

00:26:06.116 --> 00:26:08.685 as somebody who does quite a lot of

00:26:08.685 --> 00:26:10.303 synthetic synthesis work not just in

00:26:10.303 --> 00:26:12.070 the attachment field but in other fields too.

00:26:12.070 --> 00:26:14.352 The thing that I really appreciate about

00:26:14.352 --> 00:26:16.880 attachment theory and research is that they

00:26:16.880 --> 00:26:18.750 do measure things reasonably consistently.

00:26:18.750 --> 00:26:20.748 Like when I do a study of mental health,

00:26:20.750 --> 00:26:23.420 like 25 different measures of depression,

00:26:23.420 --> 00:26:24.110 like, oh great,

00:26:24.110 --> 00:26:24.570 thanks guys.

00:26:24.570 --> 00:26:27.545 That's not made my job much easier.

00:26:27.550 --> 00:26:29.210 That's true for many fields.

00:26:29.210 --> 00:26:30.410 But what attachment has done

00:26:30.410 --> 00:26:31.950 really well is on the whole,

NOTE Confidence: 0.870657532666667

00:26:31.950 --> 00:26:33.876 measure things in a pretty consistent

NOTE Confidence: 0.870657532666667

00:26:33.876 --> 00:26:36.190 way and to have fairly centralized

NOTE Confidence: 0.870657532666667

00:26:36.190 --> 00:26:38.126 trainings and coding systems.

NOTE Confidence: 0.870657532666667

00:26:38.130 --> 00:26:39.258 So when you know,

NOTE Confidence: 0.870657532666667

00:26:39.258 --> 00:26:40.950 and that makes the metro analyst

NOTE Confidence: 0.870657532666667

00:26:41.010 --> 00:26:42.138 jobs so much easier.

NOTE Confidence: 0.870657532666667

00:26:42.140 --> 00:26:43.484 And it's not just about making

NOTE Confidence: 0.870657532666667

00:26:43.484 --> 00:26:44.156 my life easier.

NOTE Confidence: 0.870657532666667

00:26:44.160 --> 00:26:46.806 It's also about having a corpus of

NOTE Confidence: 0.870657532666667

00:26:46.806 --> 00:26:49.346 evidence that is reasonably possible

NOTE Confidence: 0.870657532666667

00:26:49.346 --> 00:26:52.862 to synthesize and make draw reasonably

NOTE Confidence: 0.870657532666667

00:26:52.862 --> 00:26:55.213 you know logical conclusions from.

NOTE Confidence: 0.870657532666667

00:26:55.213 --> 00:26:57.950 Because there's just a level of like

NOTE Confidence: 0.870657532666667

00:26:58.014 --> 00:27:00.598 measuring the same thing in the same way.

NOTE Confidence: 0.870657532666667

00:27:00.600 --> 00:27:02.220 I don't know why that's been hard for so

00:27:02.220 --> 00:27:03.960 I've called for the psychological sciences,

00:27:03.960 --> 00:27:05.304 but it remains a major problem

00:27:05.304 --> 00:27:06.560 the welcome trust in the UK,

00:27:06.560 --> 00:27:08.646 I think NIH might be doing something

00:27:08.646 --> 00:27:11.070 similar in the US is trying to sort that

00:27:11.070 --> 00:27:13.398 out by by really demanding that people.

00:27:13.400 --> 00:27:14.842 You have an extremely good reason not

00:27:14.842 --> 00:27:16.082 to measure depression with the same

00:27:16.082 --> 00:27:17.246 measure that everyone else is using,

00:27:17.250 --> 00:27:17.844 for example,

00:27:17.844 --> 00:27:20.032 and I really fully support that anyway.

00:27:20.032 --> 00:27:22.444 So that's just a little diversion

00:27:22.450 --> 00:27:23.623 in that review.

00:27:23.623 --> 00:27:26.943 There are quite a number of sort

00:27:26.943 --> 00:27:28.889 of interesting.

00:27:28.890 --> 00:27:30.696 Side stories about variation in in

NOTE Confidence: 0.870657532666667

00:27:30.696 --> 00:27:32.301 the strength of the association

NOTE Confidence: 0.870657532666667

00:27:32.301 --> 00:27:34.371 that that we observe in studies

NOTE Confidence: 0.870657532666667

00:27:34.371 --> 00:27:36.080 of sensitivity and caregiving.

NOTE Confidence: 0.870657532666667

00:27:36.080 --> 00:27:37.400 I'm just going to pull out a couple

NOTE Confidence: 0.870657532666667

00:27:37.400 --> 00:27:39.068 that I think are particularly important.

NOTE Confidence: 0.870657532666667

00:27:39.070 --> 00:27:40.618 The first is that if you look at there,

NOTE Confidence: 0.870657532666667

00:27:40.620 --> 00:27:42.090 there are enough studies of dads.

NOTE Confidence: 0.9188919

00:27:42.090 --> 00:27:45.190 Now dads are terribly neglected in

NOTE Confidence: 0.9188919

00:27:45.190 --> 00:27:47.150 this field and many other fields,

NOTE Confidence: 0.9188919

00:27:47.150 --> 00:27:49.715 but we now do have a good number of

NOTE Confidence: 0.9188919

00:27:49.715 --> 00:27:51.858 studies of dads and the caregiving

NOTE Confidence: 0.9188919

00:27:51.858 --> 00:27:54.041 quality of of parental care and

NOTE Confidence: 0.9188919

00:27:54.041 --> 00:27:55.996 it predicts the attachment that

NOTE Confidence: 0.9188919

00:27:55.996 --> 00:27:58.074 that that has to that child just.

NOTE Confidence: 0.9188919

00:27:58.074 --> 00:27:59.738 As well as it does with moms

NOTE Confidence: 0.9188919

00:27:59.738 --> 00:28:01.226 and you can see those those,

NOTE Confidence: 0.9188919

00:28:01.230 --> 00:28:03.050 those are just the effect sizes there

NOTE Confidence: 0.9188919

00:28:03.050 --> 00:28:04.703 and they're exactly the same for moms

NOTE Confidence: 0.9188919

00:28:04.703 --> 00:28:06.489 and dads across quite a lot of studies.

NOTE Confidence: 0.9188919

00:28:06.490 --> 00:28:08.206 So caregiving matters and it's just

NOTE Confidence: 0.9188919

00:28:08.206 --> 00:28:09.854 and it's there's nothing about the

NOTE Confidence: 0.9188919

00:28:09.854 --> 00:28:11.222 parents gender here that we can

NOTE Confidence: 0.9188919

00:28:11.222 --> 00:28:13.017 see in terms of that relationship.

NOTE Confidence: 0.9188919

00:28:13.020 --> 00:28:15.000 That's I think pretty important.

NOTE Confidence: 0.9188919

00:28:15.000 --> 00:28:17.128 You can also see this is mostly a

NOTE Confidence: 0.9188919

00:28:17.128 --> 00:28:19.585 a bunch of slides about how things

NOTE Confidence: 0.9188919

00:28:19.585 --> 00:28:20.327 don't matter.

NOTE Confidence: 0.9188919

00:28:20.330 --> 00:28:22.052 So the other interesting thing is that

NOTE Confidence: 0.9188919

00:28:22.052 --> 00:28:24.224 if you look at the different subtypes

NOTE Confidence: 0.9188919

00:28:24.224 --> 00:28:25.949 of attachment security or insecurity,

NOTE Confidence: 0.9188919

00:28:25.950 --> 00:28:27.707 again doesn't seem to matter too much.

NOTE Confidence: 0.9188919

00:28:27.710 --> 00:28:29.280 The effect sizes are are

NOTE Confidence: 0.9188919

00:28:29.280 --> 00:28:30.850 more or less the same.

NOTE Confidence: 0.9188919

00:28:30.850 --> 00:28:32.530 There's some numerical differences there.

NOTE Confidence: 0.9188919

00:28:32.530 --> 00:28:34.960 Maybe if if we had an even larger samples

NOTE Confidence: 0.9188919

00:28:34.960 --> 00:28:37.330 and less heterogeneity across studies,

NOTE Confidence: 0.9188919

00:28:37.330 --> 00:28:38.974 perhaps we'd see that the resistant

NOTE Confidence: 0.9188919

00:28:38.974 --> 00:28:40.681 group has a slightly smaller effect

NOTE Confidence: 0.9188919

00:28:40.681 --> 00:28:42.367 size that I could believe that,

NOTE Confidence: 0.9188919

00:28:42.370 --> 00:28:43.722 but at the moment we have to conclude

NOTE Confidence: 0.9188919

00:28:43.722 --> 00:28:44.788 that it's basically the same.

NOTE Confidence: 0.888910983333333

00:28:46.890 --> 00:28:48.726 And then what really comes through,

NOTE Confidence: 0.888910983333333

00:28:48.730 --> 00:28:49.326 interestingly enough,

NOTE Confidence: 0.888910983333333

00:28:49.326 --> 00:28:51.412 is that there's quite a lot of

NOTE Confidence: 0.888910983333333

00:28:51.412 --> 00:28:52.864 methodological factors that are explaining

NOTE Confidence: 0.888910983333333

00:28:52.864 --> 00:28:54.790 some of the variability and effect size.

NOTE Confidence: 0.888910983333333

00:28:54.790 --> 00:28:58.678 So studies that use.

NOTE Confidence: 0.888910983333333

00:28:58.680 --> 00:29:00.845 Whom based assessment of attachment

NOTE Confidence: 0.888910983333333

00:29:00.845 --> 00:29:03.895 produces a large the produce a larger

NOTE Confidence: 0.888910983333333

00:29:03.895 --> 00:29:05.925 effect size for the sensitivity

NOTE Confidence: 0.888910983333333

00:29:05.925 --> 00:29:06.996 to attachment association.

NOTE Confidence: 0.888910983333333

00:29:06.996 --> 00:29:08.788 If you just go this is I

NOTE Confidence: 0.888910983333333

00:29:08.788 --> 00:29:10.159 think this is really cool.

NOTE Confidence: 0.888910983333333

00:29:10.160 --> 00:29:12.435 It's so obvious but it's it's easy

NOTE Confidence: 0.888910983333333

00:29:12.435 --> 00:29:14.808 again to neglect that if you look

NOTE Confidence: 0.888910983333333

00:29:14.808 --> 00:29:16.800 at the studies that reported higher

NOTE Confidence: 0.888910983333333

00:29:16.864 --> 00:29:18.680 rates of interrater reliability

NOTE Confidence: 0.888910983333333

00:29:18.680 --> 00:29:20.950 on the assessment of attachment.

NOTE Confidence: 0.888910983333333

00:29:20.950 --> 00:29:22.770 You get a stronger association.

NOTE Confidence: 0.888910983333333

00:29:22.770 --> 00:29:23.682 Psychometric theory told us

NOTE Confidence: 0.888910983333333

00:29:23.682 --> 00:29:25.140 that would be the case, right?

NOTE Confidence: 0.888910983333333

00:29:25.140 --> 00:29:27.000 But but actually we it's very

NOTE Confidence: 0.888910983333333

00:29:27.000 --> 00:29:28.573 convenient sometimes to wish that

NOTE Confidence: 0.888910983333333

00:29:28.573 --> 00:29:30.048 that weren't weren't the case.

NOTE Confidence: 0.888910983333333

00:29:30.050 --> 00:29:31.514 But it is to effect sizes on some

NOTE Confidence: 0.888910983333333

00:29:31.514 --> 00:29:32.845 of the variabilities just because

NOTE Confidence: 0.888910983333333

00:29:32.845 --> 00:29:34.675 we're not measuring it very well.

NOTE Confidence: 0.862230991666667

00:29:36.770 --> 00:29:37.922 And and and finally,

NOTE Confidence: 0.862230991666667

00:29:37.922 --> 00:29:39.650 it looks like there's some variation

NOTE Confidence: 0.862230991666667

00:29:39.706 --> 00:29:41.582 in the type of assessment of of

NOTE Confidence: 0.862230991666667

00:29:41.582 --> 00:29:42.926 sensitivity that that that makes

NOTE Confidence: 0.862230991666667

00:29:42.926 --> 00:29:44.627 a difference and it does appear to

NOTE Confidence: 0.862230991666667

00:29:44.627 --> 00:29:47.258 be the case that the longer the

NOTE Confidence: 0.862230991666667

00:29:47.258 --> 00:29:49.329 assessment the more predictive it is.

NOTE Confidence: 0.862230991666667

00:29:49.330 --> 00:29:51.510 Wow, look at huge revelation.

NOTE Confidence: 0.862230991666667

00:29:51.510 --> 00:29:53.168 I mean of course it makes sense, right.

NOTE Confidence: 0.862230991666667

00:29:53.168 --> 00:29:55.316 I mean you're trying to make

00:29:55.316 --> 00:29:56.390 inferences about things,

00:29:56.390 --> 00:29:58.840 patterns of care that are likely you

00:29:58.840 --> 00:30:02.464 know to be important only when they are

00:30:02.464 --> 00:30:04.959 characteristic of the everyday regular

00:30:05.040 --> 00:30:07.650 long run experience that the child.

00:30:07.650 --> 00:30:09.379 And we use a 5 minute observation

00:30:09.379 --> 00:30:11.474 to try and make all of those

00:30:11.474 --> 00:30:12.766 enormous leaps of inference.

00:30:12.770 --> 00:30:14.000 That's that's a that's a

00:30:14.000 --> 00:30:15.230 big ask for our tools.

00:30:15.230 --> 00:30:16.170 And the longer they are,

00:30:16.170 --> 00:30:17.148 the more in depth they are.

00:30:17.150 --> 00:30:18.110 It looks like the more,

00:30:18.110 --> 00:30:20.588 the more predictable the the these

00:30:20.588 --> 00:30:22.240 kind of relationships become.

00:30:22.240 --> 00:30:23.220 So again, no surprise,

NOTE Confidence: 0.862230991666667

00:30:23.220 --> 00:30:24.690 but I think it just emphasizes

NOTE Confidence: 0.862230991666667

00:30:24.743 --> 00:30:25.911 some really important things

NOTE Confidence: 0.862230991666667

00:30:25.911 --> 00:30:27.371 about methodology and I'm going

NOTE Confidence: 0.862230991666667

00:30:27.371 --> 00:30:29.099 to come back to that methodology,

NOTE Confidence: 0.862230991666667

00:30:29.100 --> 00:30:30.700 measurement quality super important and

NOTE Confidence: 0.862230991666667

00:30:30.700 --> 00:30:33.279 I'll come back to that in a little while.

NOTE Confidence: 0.862230991666667

00:30:33.280 --> 00:30:33.513 OK.

NOTE Confidence: 0.862230991666667

00:30:33.513 --> 00:30:35.144 So that's that's the first part of

NOTE Confidence: 0.862230991666667

00:30:35.144 --> 00:30:36.424 the question on, on environment.

NOTE Confidence: 0.862230991666667

00:30:36.424 --> 00:30:37.984 So that the association is

NOTE Confidence: 0.862230991666667

00:30:37.984 --> 00:30:38.920 really clearly there.

NOTE Confidence: 0.862230991666667

00:30:38.920 --> 00:30:39.960 Some of the facts,

NOTE Confidence: 0.862230991666667

00:30:39.960 --> 00:30:41.910 some of the lower associations that we see,

NOTE Confidence: 0.862230991666667

00:30:41.910 --> 00:30:43.041 it's probably methodological.

NOTE Confidence: 0.862230991666667

00:30:43.041 --> 00:30:44.926 There's also probably not a

NOTE Confidence: 0.862230991666667

00:30:44.926 --> 00:30:46.080 massive association either.

NOTE Confidence: 0.862230991666667

00:30:46.080 --> 00:30:47.984 So there's quite a bit more to learn

NOTE Confidence: 0.862230991666667

00:30:47.984 --> 00:30:50.232 in terms of how to properly measure

NOTE Confidence: 0.862230991666667

00:30:50.232 --> 00:30:51.839 the parental behaviors involved and.

NOTE Confidence: 0.862230991666667

00:30:51.839 --> 00:30:53.512 And whether we're even in the right

NOTE Confidence: 0.862230991666667

00:30:53.512 --> 00:30:55.142 ballpark for the kinds of behaviors

NOTE Confidence: 0.862230991666667

00:30:55.142 --> 00:30:56.792 that are relevant even that's probably

NOTE Confidence: 0.862230991666667

00:30:56.846 --> 00:30:58.610 something we need to be thinking about.

NOTE Confidence: 0.862230991666667

00:30:58.610 --> 00:31:00.930 But even if this is pure association studies,

NOTE Confidence: 0.862230991666667

00:31:00.930 --> 00:31:01.276 right.

NOTE Confidence: 0.862230991666667

00:31:01.276 --> 00:31:03.698 So you all know that the potential

NOTE Confidence: 0.862230991666667

00:31:03.698 --> 00:31:05.216 counter argument is that, well,

NOTE Confidence: 0.862230991666667

00:31:05.216 --> 00:31:06.646 this is just like epiphenomenal.

NOTE Confidence: 0.862230991666667

00:31:06.650 --> 00:31:07.642 It's not, you know,

NOTE Confidence: 0.862230991666667

00:31:07.642 --> 00:31:07.890 yes,

NOTE Confidence: 0.862230991666667

00:31:07.890 --> 00:31:09.234 this sort of correlated

NOTE Confidence: 0.862230991666667

00:31:09.234 --> 00:31:10.578 patterns of parental behavior,

NOTE Confidence: 0.862230991666667

00:31:10.580 --> 00:31:11.715 but that's because they're responding

NOTE Confidence: 0.862230991666667

00:31:11.715 --> 00:31:13.130 to what the child is doing.

NOTE Confidence: 0.862230991666667

00:31:13.130 --> 00:31:14.663 Maybe this is just a kind of

NOTE Confidence: 0.862230991666667

00:31:14.663 --> 00:31:16.588 what we call a gene environment

NOTE Confidence: 0.862230991666667

00:31:16.588 --> 00:31:18.565 correlation and that it's not really

NOTE Confidence: 0.862230991666667

00:31:18.565 --> 00:31:19.825 a truly environmental process,

NOTE Confidence: 0.862230991666667

00:31:19.830 --> 00:31:20.306 right,

NOTE Confidence: 0.862230991666667

00:31:20.306 --> 00:31:20.782 so.

NOTE Confidence: 0.862230991666667

00:31:20.782 --> 00:31:23.162 Genetics is something that until

NOTE Confidence: 0.862230991666667

00:31:23.162 --> 00:31:24.993 relatively recently hadn't been

NOTE Confidence: 0.862230991666667

00:31:24.993 --> 00:31:27.324 ruled out as a as a possible

NOTE Confidence: 0.862230991666667

00:31:27.324 --> 00:31:29.388 explanation for the variability and

NOTE Confidence: 0.862230991666667

00:31:29.388 --> 00:31:31.598 attachment behavior that we see.

NOTE Confidence: 0.862230991666667

00:31:31.600 --> 00:31:34.414 And attachment theory does make this

64

NOTE Confidence: 0.862230991666667

00:31:34.414 --> 00:31:37.280 really kind of brave prediction.

NOTE Confidence: 0.862230991666667

00:31:37.280 --> 00:31:39.002 Brave in the sense that everybody

NOTE Confidence: 0.862230991666667

00:31:39.002 --> 00:31:40.762 who studies Psych 101 or whatever

NOTE Confidence: 0.862230991666667

00:31:40.762 --> 00:31:42.147 and knows that every behavior

NOTE Confidence: 0.862230991666667

00:31:42.147 --> 00:31:44.154 you care to mention is strongly

NOTE Confidence: 0.862230991666667

00:31:44.154 --> 00:31:45.542 influenced by genetics, right?

NOTE Confidence: 0.862230991666667

00:31:45.542 --> 00:31:47.376 That's I make this kind of like

NOTE Confidence: 0.862230991666667

00:31:47.376 --> 00:31:48.597 slightly tired joke now that

NOTE Confidence: 0.862230991666667

00:31:48.597 --> 00:31:50.088 I never set this on the exam,

NOTE Confidence: 0.862230991666667

00:31:50.090 --> 00:31:52.586 because the answer is always 50%.

NOTE Confidence: 0.862230991666667

00:31:52.590 --> 00:31:54.390 50% heritability is pretty much

NOTE Confidence: 0.862230991666667

00:31:54.390 --> 00:31:55.830 true for almost everything.

NOTE Confidence: 0.862230991666667

00:31:55.830 --> 00:31:57.840 So attachment stands out as

NOTE Confidence: 0.862230991666667

00:31:57.840 --> 00:31:59.850 saying not in this case.

NOTE Confidence: 0.862230991666667

00:31:59.850 --> 00:32:01.835 In this case, it's 100% environment,

NOTE Confidence: 0.862230991666667

00:32:01.835 --> 00:32:04.505 which is a pretty brave and

NOTE Confidence: 0.862230991666667

00:32:04.505 --> 00:32:06.596 strong prediction given what we

NOTE Confidence: 0.862230991666667

00:32:06.596 --> 00:32:08.642 know about so many other domains

NOTE Confidence: 0.862230991666667

00:32:08.642 --> 00:32:10.423 of human behavioral difference.

NOTE Confidence: 0.862230991666667

00:32:10.423 --> 00:32:12.421 So it becomes pretty interesting to

NOTE Confidence: 0.862230991666667

00:32:12.421 --> 00:32:14.544 think about what would what if you

NOTE Confidence: 0.862230991666667

00:32:14.544 --> 00:32:16.140 were to subject attachment to the

NOTE Confidence: 0.846388868

00:32:16.192 --> 00:32:17.524 kind of methodological interrogation

NOTE Confidence: 0.846388868

00:32:17.524 --> 00:32:19.862 that we do other domains of development,

NOTE Confidence: 0.846388868

00:32:19.862 --> 00:32:22.518 like for example, using a twin study. What?

NOTE Confidence: 0.846388868

00:32:22.518 --> 00:32:25.142 How does that look and Can you imagine?

NOTE Confidence: 0.846388868

00:32:25.150 --> 00:32:26.526 I always thought it would be kind of.

NOTE Confidence: 0.846388868

00:32:26.530 --> 00:32:27.699 I didn't think about this at the

NOTE Confidence: 0.846388868

00:32:27.699 --> 00:32:29.030 time when we were doing this work,

NOTE Confidence: 0.846388868

00:32:29.030 --> 00:32:30.864 but but subsequently I thought about it.

NOTE Confidence: 0.846388868

00:32:30.870 --> 00:32:33.278 But what would it have looked like if

00:32:33.278 --> 00:32:35.211 identical twins just behaved in an

00:32:35.211 --> 00:32:37.119 incredibly similar way in the strange

00:32:37.179 --> 00:32:39.507 situation and non identical twins didn't?

00:32:39.510 --> 00:32:40.965 And that would be incredibly

00:32:40.965 --> 00:32:41.547 interesting right.

00:32:41.550 --> 00:32:43.530 And surprising and and challenging

00:32:43.530 --> 00:32:45.510 for the for the field.

00:32:45.510 --> 00:32:47.526 But it wasn't really tested until a group

00:32:47.526 --> 00:32:49.856 of us back in the early 2000s started

00:32:49.856 --> 00:32:51.816 started looking at that directly using

00:32:51.816 --> 00:32:53.988 that kind of powerful twin methodology.

00:32:53.990 --> 00:32:55.999 And the short answer to that is

00:32:55.999 --> 00:32:58.046 that his this is this is showing

00:32:58.046 --> 00:32:59.698 you the proportion of variability

00:32:59.698 --> 00:33:02.111 from that first study we did with

00:33:02.111 --> 00:33:04.176 twins at 12 months that could be

NOTE Confidence: 0.846388868

00:33:04.176 --> 00:33:06.129 explained by genes and environment.

NOTE Confidence: 0.846388868

00:33:06.130 --> 00:33:08.110 And I make the lame joke that the pink

NOTE Confidence: 0.846388868

00:33:08.110 --> 00:33:09.907 bar is the bit that's to do with.

NOTE Confidence: 0.846388868

00:33:09.910 --> 00:33:11.770 Essex there is no people,

NOTE Confidence: 0.846388868

00:33:11.770 --> 00:33:12.040 right?

NOTE Confidence: 0.846388868

00:33:12.040 --> 00:33:13.930 So we found that that that really

NOTE Confidence: 0.846388868

00:33:13.930 --> 00:33:15.972 we couldn't see any sign of genetic

NOTE Confidence: 0.846388868

00:33:15.972 --> 00:33:17.422 influence on attachment and they

NOTE Confidence: 0.846388868

00:33:17.483 --> 00:33:19.193 really were behaving quite similarly

NOTE Confidence: 0.846388868

00:33:19.193 --> 00:33:20.903 in the strange situation with

NOTE Confidence: 0.846388868

00:33:20.910 --> 00:33:22.960 respect to the same caregiver.

NOTE Confidence: 0.846388868

00:33:22.960 --> 00:33:24.454 But identical twins were doing it

NOTE Confidence: 0.846388868

00:33:24.454 --> 00:33:26.038 to exactly the same extent that

NOTE Confidence: 0.846388868

00:33:26.038 --> 00:33:27.658 non identical twins were doing it,

NOTE Confidence: 0.846388868

00:33:27.660 --> 00:33:29.760 which is a kind of hallmark

NOTE Confidence: 0.846388868

00:33:29.760 --> 00:33:31.160 characteristic of something that

NOTE Confidence: 0.846388868

00:33:31.219 --> 00:33:32.968 is environmentally determined.

NOTE Confidence: 0.846388868

00:33:32.970 --> 00:33:34.510 And it's particularly determined by

NOTE Confidence: 0.846388868

00:33:34.510 --> 00:33:36.730 what we call the shared environment.

NOTE Confidence: 0.846388868

00:33:36.730 --> 00:33:38.221 And I'm sure you kind of know

NOTE Confidence: 0.846388868

00:33:38.221 --> 00:33:39.250 all this terminology already,

NOTE Confidence: 0.846388868

00:33:39.250 --> 00:33:41.095 but the shared environment makes

NOTE Confidence: 0.846388868

00:33:41.095 --> 00:33:43.414 particular sense in the context of

NOTE Confidence: 0.846388868

00:33:43.414 --> 00:33:45.054 attachment research because we're

NOTE Confidence: 0.846388868

00:33:45.054 --> 00:33:47.104 assuming that there's a consistent

NOTE Confidence: 0.846388868

00:33:47.162 --> 00:33:49.571 disposition that a caregiver has to

NOTE Confidence: 0.846388868

00:33:49.571 --> 00:33:52.376 being sensitive or less sensitive.

NOTE Confidence: 0.846388868

00:33:52.380 --> 00:33:53.970 And and that's what's driving these

NOTE Confidence: 0.846388868

00:33:53.970 --> 00:33:55.030 individual differences in attachment.

NOTE Confidence: 0.846388868

00:33:55.030 --> 00:33:55.970 And if that's your theory,

NOTE Confidence: 0.846388868

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00:33:55.970 --> 00:33:58.399 then you'd expect to see a really

NOTE Confidence: 0.846388868

00:33:58.399 --> 00:33:59.910 strong common environment effect,

NOTE Confidence: 0.846388868

00:33:59.910 --> 00:34:02.382 which again the other thing everybody

NOTE Confidence: 0.846388868

00:34:02.382 --> 00:34:04.030 remembers about behavioral genetics

NOTE Confidence: 0.846388868

00:34:04.093 --> 00:34:06.228 site 101 is that there aren't really

NOTE Confidence: 0.846388868

00:34:06.228 --> 00:34:07.580 any strong shared environmental

NOTE Confidence: 0.846388868

00:34:07.580 --> 00:34:10.226 effects in most areas of behavior and

NOTE Confidence: 0.846388868

00:34:10.226 --> 00:34:12.430 attachment from the study we did back

NOTE Confidence: 0.846388868

00:34:12.430 --> 00:34:14.609 then and some other since really seems

NOTE Confidence: 0.846388868

00:34:14.609 --> 00:34:17.305 to be an important exception to that rule,

NOTE Confidence: 0.846388868

00:34:17.310 --> 00:34:20.130 just as attachment theory had predicted.

NOTE Confidence: 0.846388868

00:34:20.130 --> 00:34:21.514 This was nice replication

NOTE Confidence: 0.846388868

00:34:21.514 --> 00:34:23.360 by Rose Mccraley in 2008.

NOTE Confidence: 0.846388868

00:34:23.360 --> 00:34:25.200 The larger scale shows

NOTE Confidence: 0.846388868

00:34:25.200 --> 00:34:27.500 very much the same thing.

NOTE Confidence: 0.846388868

00:34:27.500 --> 00:34:28.200 So oh,

NOTE Confidence: 0.846388868

00:34:28.200 --> 00:34:31.659 and also actually if you if you look at the,

NOTE Confidence: 0.846388868

00:34:31.660 --> 00:34:33.781 if you try to analyze the parental

NOTE Confidence: 0.846388868

00:34:33.781 --> 00:34:35.359 behavior at the same time,

NOTE Confidence: 0.846388868

00:34:35.360 --> 00:34:36.848 you also find that the parental

NOTE Confidence: 0.846388868

00:34:36.848 --> 00:34:38.209 behavior shows very little sign

NOTE Confidence: 0.846388868

00:34:38.209 --> 00:34:39.477 of gene environment correlation.

NOTE Confidence: 0.846388868

00:34:39.480 --> 00:34:41.280 So it doesn't look as if the parental

NOTE Confidence: 0.846388868

00:34:41.280 --> 00:34:42.575 behavior is kind of influenced

NOTE Confidence: 0.846388868

00:34:42.575 --> 00:34:43.627 by the child's genes.

NOTE Confidence: 0.846388868

00:34:43.630 --> 00:34:46.478 And it's lots of common environment in that.

NOTE Confidence: 0.846388868

00:34:46.480 --> 00:34:48.530 And that common environment correlates

NOTE Confidence: 0.846388868

00:34:48.530 --> 00:34:50.170 with the common environmental

NOTE Confidence: 0.846388868

00:34:50.170 --> 00:34:51.709 variability we see in attachment,

NOTE Confidence: 0.846388868

00:34:51.710 --> 00:34:54.356 which all ties up pretty elegantly with

NOTE Confidence: 0.846388868

00:34:54.356 --> 00:34:58.320 what attachment theorists had had predicted.

NOTE Confidence: 0.846388868

00:34:58.320 --> 00:34:58.911 And you know,

NOTE Confidence: 0.846388868

00:34:58.911 --> 00:35:00.290 kind of I suppose in hindsight a

NOTE Confidence: 0.839055424666666

00:35:00.335 --> 00:35:01.450 bit of kind of miraculous.

NOTE Confidence: 0.839055424666666

00:35:01.450 --> 00:35:03.088 It could have been a bit earth

NOTE Confidence: 0.839055424666666

00:35:03.088 --> 00:35:04.639 shattering at this point like Ohh

NOTE Confidence: 0.839055424666666

00:35:04.639 --> 00:35:05.974 Fearon and his colleagues are

NOTE Confidence: 0.839055424666666

00:35:05.974 --> 00:35:07.420 just ruined attachment theory.

NOTE Confidence: 0.839055424666666

00:35:07.420 --> 00:35:09.576 And, you know, it would have been,

NOTE Confidence: 0.839055424666666

00:35:09.580 --> 00:35:10.738 it would have been a pretty

NOTE Confidence: 0.839055424666666

00:35:10.738 --> 00:35:11.317 major challenge right,

NOTE Confidence: 0.839055424666666

00:35:11.320 --> 00:35:12.841 if we found that that were not was not

NOTE Confidence: 0.839055424666666

00:35:12.841 --> 00:35:14.347 the case and it could easily happen.

NOTE Confidence: 0.839055424666666

00:35:14.350 --> 00:35:15.920 And that's there aren't many

NOTE Confidence: 0.839055424666666

00:35:15.920 --> 00:35:17.870 experiments you can do in psychology

NOTE Confidence: 0.839055424666666

00:35:17.870 --> 00:35:20.110 where the answer could be quite as

NOTE Confidence: 0.839055424666666

00:35:20.110 --> 00:35:22.234 clear cut and pretty kind of earth

NOTE Confidence: 0.839055424666666

00:35:22.234 --> 00:35:24.240 shattering in terms of a treasured

NOTE Confidence: 0.839055424666666

00:35:24.240 --> 00:35:27.140 hypothesis within within the field.

NOTE Confidence: 0.839055424666666

00:35:27.140 --> 00:35:29.009 But in this case that that that

NOTE Confidence: 0.839055424666666

00:35:29.009 --> 00:35:30.659 didn't happen and actually the

NOTE Confidence: 0.839055424666666

00:35:30.659 --> 00:35:32.644 evidence is pretty consistent with

NOTE Confidence: 0.839055424666666

00:35:32.644 --> 00:35:34.280 predictions of attachment theory.

NOTE Confidence: 0.839055424666666

00:35:34.280 --> 00:35:36.485 Oh. Why did I put that twice?

NOTE Confidence: 0.839055424666666

00:35:36.490 --> 00:35:37.382 Oh no, it's fine.

NOTE Confidence: 0.839055424666666

00:35:37.382 --> 00:35:39.294 The other thing to mention is that this

NOTE Confidence: 0.839055424666666

00:35:39.294 --> 00:35:41.107 shouldn't have been much of a surprise,

NOTE Confidence: 0.839055424666666

00:35:41.110 --> 00:35:42.124 I don't think,

NOTE Confidence: 0.839055424666666

00:35:42.124 --> 00:35:43.814 because actually it was built

NOTE Confidence: 0.839055424666666

00:35:43.814 --> 00:35:45.749 on fairly strong foundations.

NOTE Confidence: 0.839055424666666

00:35:45.750 --> 00:35:46.276 The the,

NOTE Confidence: 0.839055424666666

00:35:46.276 --> 00:35:48.117 the most important is actually that there

NOTE Confidence: 0.839055424666666

00:35:48.117 --> 00:35:49.931 was quite a lot of evidence already

NOTE Confidence: 0.839055424666666

00:35:49.931 --> 00:35:52.150 that if you studied the attachment behavior,

NOTE Confidence: 0.839055424666666

00:35:52.150 --> 00:35:54.590 a child had to add mum and then to a dad,

NOTE Confidence: 0.839055424666666

00:35:54.590 --> 00:35:56.310 they were often completely different,

NOTE Confidence: 0.839055424666666

00:35:56.310 --> 00:35:57.158 like secure with one,

NOTE Confidence: 0.839055424666666

00:35:57.158 --> 00:35:58.006 insecure with the other,

NOTE Confidence: 0.839055424666666

00:35:58.010 --> 00:35:58.868 and vice versa.

NOTE Confidence: 0.839055424666666

00:35:58.868 --> 00:36:00.584 That's already quite a clue that

NOTE Confidence: 0.839055424666666

00:36:00.584 --> 00:36:01.885 there's something that's that's

NOTE Confidence: 0.839055424666666

00:36:01.885 --> 00:36:03.811 a kind of adaptation to that

NOTE Confidence: 0.839055424666666

00:36:03.811 --> 00:36:05.520 particular caregiver that's going on.

NOTE Confidence: 0.839055424666666

00:36:05.520 --> 00:36:07.501 It's not a sort of cross situationally

NOTE Confidence: 0.839055424666666

00:36:07.501 --> 00:36:09.165 stable pattern of behavior that you

NOTE Confidence: 0.839055424666666

00:36:09.165 --> 00:36:11.342 might expect if it was some sort of

NOTE Confidence: 0.839055424666666

00:36:11.342 --> 00:36:12.758 genetic or temperamental factor.

NOTE Confidence: 0.839055424666666

00:36:12.760 --> 00:36:14.326 So there's already quite a strong

NOTE Confidence: 0.839055424666666

00:36:14.326 --> 00:36:15.770 clue from the from evidence

NOTE Confidence: 0.839055424666666

00:36:15.770 --> 00:36:17.138 with mothers and fathers.

NOTE Confidence: 0.839055424666666

00:36:17.140 --> 00:36:19.212 There was also some evidence coming from

NOTE Confidence: 0.839055424666666

00:36:19.212 --> 00:36:20.899 studies of children in foster care,

NOTE Confidence: 0.839055424666666

00:36:20.900 --> 00:36:22.300 where of course there's no

NOTE Confidence: 0.839055424666666

00:36:22.300 --> 00:36:23.700 genetic link between the foster

NOTE Confidence: 0.839055424666666

00:36:23.753 --> 00:36:25.300 carer and the child and the the,

NOTE Confidence: 0.839055424666666

00:36:25.300 --> 00:36:25.984 the child's,

NOTE Confidence: 0.839055424666666

00:36:25.984 --> 00:36:26.668 you know,

NOTE Confidence: 0.839055424666666

00:36:26.668 --> 00:36:28.720 attachment to that foster carer was

NOTE Confidence: 0.839055424666666

00:36:28.783 --> 00:36:29.950 predictable from characteristics

NOTE Confidence: 0.839055424666666

00:36:29.950 --> 00:36:32.284 of the parent and again gives

NOTE Confidence: 0.839055424666666

00:36:32.284 --> 00:36:33.918 you the adoptive parent,

NOTE Confidence: 0.839055424666666

00:36:33.920 --> 00:36:35.756 which gives you another pretty strong.

NOTE Confidence: 0.839055424666666

00:36:35.760 --> 00:36:39.372 Tell you this is really quite an

NOTE Confidence: 0.839055424666666

00:36:39.372 --> 00:36:40.920 environmentally determined thing.

NOTE Confidence: 0.839055424666666

00:36:40.920 --> 00:36:41.290 OK.

NOTE Confidence: 0.839055424666666

00:36:41.290 --> 00:36:43.510 So actually the evidence is actually

NOTE Confidence: 0.839055424666666

00:36:43.510 --> 00:36:44.980 really consistent with that.

NOTE Confidence: 0.839055424666666

00:36:44.980 --> 00:36:45.895 I'm pretty convinced even though

NOTE Confidence: 0.839055424666666

00:36:45.895 --> 00:36:47.197 I'd love to see a much bigger

NOTE Confidence: 0.839055424666666

00:36:47.197 --> 00:36:48.401 study and I'm going to come back

NOTE Confidence: 0.839055424666666

00:36:48.401 --> 00:36:49.460 to that in a little while.

NOTE Confidence: 0.839055424666666

00:36:49.460 --> 00:36:51.500 But I'm pretty convinced that the,

NOTE Confidence: 0.839055424666666

00:36:51.500 --> 00:36:53.048 that attachment theory was on the

NOTE Confidence: 0.839055424666666

00:36:53.048 --> 00:36:55.189 money in terms of this being a

NOTE Confidence: 0.839055424666666

00:36:55.189 --> 00:36:56.589 particularly and very interestingly

NOTE Confidence: 0.839055424666666

00:36:56.589 --> 00:36:57.959 highly plastic early behavioral

NOTE Confidence: 0.839055424666666

00:36:57.959 --> 00:36:59.835 system that learns a lot and adapts

NOTE Confidence: 0.839055424666666

00:36:59.835 --> 00:37:01.020 to the caregiving environment.

NOTE Confidence: 0.839055424666666

00:37:01.020 --> 00:37:02.744 That seems to be, you know,

00:37:02.744 --> 00:37:03.854 the evidence is pretty good

00:37:03.854 --> 00:37:05.040 on that I would say,

00:37:05.040 --> 00:37:06.444 but what about later in development

00:37:06.444 --> 00:37:07.612 because we mentioned at the

00:37:07.612 --> 00:37:08.527 beginning this is supposed to

00:37:08.527 --> 00:37:10.119 be kind of a construct that is

00:37:10.119 --> 00:37:11.484 consistent right across the lifespan.

00:37:11.490 --> 00:37:12.363 And certainly it's,

00:37:12.363 --> 00:37:14.109 it's relevant right across the lifespan.

00:37:14.110 --> 00:37:16.230 So what about in other stages of development?

00:37:16.230 --> 00:37:18.558 So relatively recently we decided to

00:37:18.558 --> 00:37:21.530 do this kind of whole thing again.

00:37:21.530 --> 00:37:23.250 But look at adolescence attachment

00:37:23.250 --> 00:37:24.626 simulation to their parents.

00:37:24.630 --> 00:37:26.040 We used a tool called the

00:37:26.040 --> 00:37:26.745 Child Attachment Interview,

NOTE Confidence: 0.816706530833333

00:37:26.750 --> 00:37:28.115 which many of you here I think

NOTE Confidence: 0.816706530833333

00:37:28.115 --> 00:37:29.070 would be familiar with it.

NOTE Confidence: 0.816706530833333

00:37:29.070 --> 00:37:30.330 It's a different kind of tool.

NOTE Confidence: 0.816706530833333

00:37:30.330 --> 00:37:31.880 It's it's not looking at

NOTE Confidence: 0.816706530833333

00:37:31.880 --> 00:37:32.810 live attachment behavior,

NOTE Confidence: 0.816706530833333

00:37:32.810 --> 00:37:34.665 it's looking at patterns of speech really

NOTE Confidence: 0.816706530833333

00:37:34.665 --> 00:37:36.327 and narrative in a in an interview.

NOTE Confidence: 0.816706530833333

00:37:36.330 --> 00:37:37.510 So different kind of thing,

NOTE Confidence: 0.816706530833333

00:37:37.510 --> 00:37:39.617 but in theory supposed to be measuring

NOTE Confidence: 0.816706530833333

00:37:39.617 --> 00:37:41.657 attachment we did in a big twin study.

NOTE Confidence: 0.816706530833333

00:37:41.660 --> 00:37:43.706 Um, relatively back, at least for

NOTE Confidence: 0.816706530833333

00:37:43.706 --> 00:37:45.870 this kind of intensive measurement.

NOTE Confidence: 0.816706530833333

00:37:45.870 --> 00:37:49.718 551 same-sex twin pairs.

NOTE Confidence: 0.816706530833333

00:37:49.720 --> 00:37:51.344 And you know, and we were very

NOTE Confidence: 0.816706530833333

00:37:51.344 --> 00:37:52.910 careful about the methodology here.

00:37:52.910 --> 00:37:54.758 So there's no way that they could

00:37:54.758 --> 00:37:56.872 have been any kind of crosstalk

00:37:56.872 --> 00:37:58.135 between these measurements.

00:37:58.140 --> 00:37:59.328 And we did the same thing.

00:37:59.330 --> 00:38:01.268 We just tested whether this was

00:38:01.268 --> 00:38:04.254 going to show a similar pattern of

00:38:04.254 --> 00:38:06.414 very strong environmental influence.

00:38:06.420 --> 00:38:08.364 And very strong influence,

00:38:08.364 --> 00:38:10.794 particularly of the shared environment

00:38:10.794 --> 00:38:12.407 and so as not to keep you waiting.

00:38:12.410 --> 00:38:14.706 This is what we found if you

00:38:14.706 --> 00:38:16.810 don't know this study already.

00:38:16.810 --> 00:38:18.930 This time, the pink.

00:38:18.930 --> 00:38:21.252 Portion of the pie chart

00:38:21.252 --> 00:38:22.716 was the shared environment.

00:38:22.720 --> 00:38:24.092 It was absolutely zero.

NOTE Confidence: 0.816706530833333

00:38:24.092 --> 00:38:26.150 We saw no evidence of shared

NOTE Confidence: 0.816706530833333

00:38:26.219 --> 00:38:27.704 environmental influence on

NOTE Confidence: 0.816706530833333

00:38:27.704 --> 00:38:30.179 attachment in adolescence at all.

NOTE Confidence: 0.816706530833333

00:38:30.180 --> 00:38:31.755 Look, this is just tried my effort

NOTE Confidence: 0.816706530833333

00:38:31.755 --> 00:38:33.736 to prove to you that I'm, I'm, I'm,

NOTE Confidence: 0.816706530833333

00:38:33.736 --> 00:38:36.200 I'm, I'm, I just go with the data.

NOTE Confidence: 0.816706530833333

00:38:36.200 --> 00:38:38.480 This was definitely not my hypothesis,

NOTE Confidence: 0.816706530833333

00:38:38.480 --> 00:38:40.235 but this, the data is really clear on it.

NOTE Confidence: 0.816706530833333

00:38:40.240 --> 00:38:41.728 From this particular study,

NOTE Confidence: 0.816706530833333

00:38:41.728 --> 00:38:44.768 we saw about 40% of the variance

NOTE Confidence: 0.816706530833333

00:38:44.768 --> 00:38:47.348 was accounted for by genetics.

NOTE Confidence: 0.816706530833333

00:38:47.350 --> 00:38:48.740 And the remainder was really

NOTE Confidence: 0.816706530833333

00:38:48.740 --> 00:38:49.574 non shared environment.

NOTE Confidence: 0.816706530833333

00:38:49.580 --> 00:38:50.664 So this was like.

NOTE Confidence: 0.816706530833333

00:38:50.664 --> 00:38:52.290 A little bit of a shock,

NOTE Confidence: 0.816706530833333

00:38:52.290 --> 00:38:53.355 in a way.

NOTE Confidence: 0.816706530833333

00:38:53.355 --> 00:38:55.840 It certainly does not suggest that the

NOTE Confidence: 0.816706530833333

00:38:55.919 --> 00:38:59.029 determinants of attachment in adolescence.

NOTE Confidence: 0.816706530833333

00:38:59.030 --> 00:39:01.130 Are the same as the determinants

NOTE Confidence: 0.816706530833333

00:39:01.130 --> 00:39:03.018 of attachment in infancy and

NOTE Confidence: 0.816706530833333

00:39:03.018 --> 00:39:05.458 that's a pretty important and

NOTE Confidence: 0.816706530833333

00:39:05.458 --> 00:39:07.703 so far not understood process.

NOTE Confidence: 0.816706530833333

00:39:07.703 --> 00:39:10.047 But to me the evidence is pretty clear.

NOTE Confidence: 0.816706530833333

00:39:10.050 --> 00:39:12.102 It's it's the one big study on this right.

NOTE Confidence: 0.816706530833333

00:39:12.110 --> 00:39:14.550 So we're definitely needs replicating.

NOTE Confidence: 0.816706530833333

00:39:14.550 --> 00:39:15.785 You could definitely think about

NOTE Confidence: 0.816706530833333

00:39:15.785 --> 00:39:17.020 other measures that could be

NOTE Confidence: 0.816706530833333

00:39:17.060 --> 00:39:18.410 used to assess attachment in

NOTE Confidence: 0.816706530833333

00:39:18.410 --> 00:39:19.490 different ways and adolescence.

NOTE Confidence: 0.816706530833333

00:39:19.490 --> 00:39:21.542 But from the data we got so far it

NOTE Confidence: 0.816706530833333

00:39:21.542 --> 00:39:23.945 looks to me like there's an important

00:39:23.945 --> 00:39:25.357 shift that potentially happens

00:39:25.417 --> 00:39:27.181 between infancy and adolescence

00:39:27.181 --> 00:39:28.945 where the adolescence genetic.

00:39:28.950 --> 00:39:31.001 Kind of dispositions starts to play a

00:39:31.001 --> 00:39:32.626 much more important role in attachment

00:39:32.626 --> 00:39:34.710 of that age than it did in infancy.

00:39:36.930 --> 00:39:39.440 Oh, I've just more or less said that the,

00:39:39.440 --> 00:39:40.960 the. Now the. I suppose the question is,

00:39:40.960 --> 00:39:41.835 and I put it to you actually,

00:39:41.840 --> 00:39:42.604 the question is why?

00:39:42.604 --> 00:39:43.750 Like how do we understand this?

00:39:43.750 --> 00:39:46.330 Like, what's what's going on developmentally?

00:39:46.330 --> 00:39:47.429 We don't know the answer to that.

00:39:47.430 --> 00:39:51.077 And clearly, but I think the most

00:39:51.077 --> 00:39:53.904 plausible explanation is that over time.

NOTE Confidence: 0.75257324625

00:39:53.904 --> 00:39:56.346 The child's dispositions start to really

NOTE Confidence: 0.75257324625

00:39:56.346 --> 00:39:58.568 impact on parent child interactions

NOTE Confidence: 0.75257324625

00:39:58.568 --> 00:40:00.803 in significant ways and actually

NOTE Confidence: 0.75257324625

00:40:00.803 --> 00:40:03.295 again if you think if I went to,

NOTE Confidence: 0.75257324625

00:40:03.300 --> 00:40:04.364 you know, Joe Bloggs.

NOTE Confidence: 0.75257324625

00:40:04.364 --> 00:40:06.619 She's a very British way of putting it,

NOTE Confidence: 0.75257324625

00:40:06.620 --> 00:40:07.388 but somebody, you know,

NOTE Confidence: 0.75257324625

00:40:07.388 --> 00:40:08.348 random guy on the street,

NOTE Confidence: 0.75257324625

00:40:08.350 --> 00:40:10.040 what's is there an American

NOTE Confidence: 0.75257324625

00:40:10.040 --> 00:40:11.392 version of Joe Bloggs?

NOTE Confidence: 0.75257324625

00:40:11.400 --> 00:40:12.450 It's like audio.

NOTE Confidence: 0.75257324625

00:40:12.450 --> 00:40:14.000 You do say, Joe Bloggs.

NOTE Confidence: 0.75257324625

00:40:14.000 --> 00:40:14.500 Oh great.

NOTE Confidence: 0.779273358

00:40:17.060 --> 00:40:18.370 If I asked Joe Bloggs,

NOTE Confidence: 0.779273358

00:40:18.370 --> 00:40:20.176 he would say, well yeah obviously,

NOTE Confidence: 0.779273358

00:40:20.180 --> 00:40:21.950 you know teenagers are totally

NOTE Confidence: 0.779273358

00:40:21.950 --> 00:40:23.720 different proposition to a baby.

NOTE Confidence: 0.779273358

00:40:23.720 --> 00:40:25.510 A teenager will give you a hell of a lot

NOTE Confidence: 0.779273358

00:40:25.560 --> 00:40:27.396 more you know to think about than a baby.

NOTE Confidence: 0.779273358

00:40:27.400 --> 00:40:28.996 And and the power is totally

NOTE Confidence: 0.779273358

00:40:28.996 --> 00:40:30.407 different and there's lots more

NOTE Confidence: 0.779273358

00:40:30.407 --> 00:40:32.153 that the teenager brings to your

NOTE Confidence: 0.779273358

00:40:32.153 --> 00:40:33.984 interactions than with the baby where

NOTE Confidence: 0.779273358

00:40:33.984 --> 00:40:35.499 actually the baby brings something.

NOTE Confidence: 0.779273358

00:40:35.500 --> 00:40:37.432 But there's there's a there's a

NOTE Confidence: 0.779273358

00:40:37.432 --> 00:40:39.032 hugely different kind of level

NOTE Confidence: 0.779273358

00:40:39.032 --> 00:40:40.803 of dependency and and and in a

NOTE Confidence: 0.779273358

00:40:40.803 --> 00:40:42.748 sense a lack of relative agency

NOTE Confidence: 0.779273358

00:40:42.748 --> 00:40:44.473 in those interactions compared to

NOTE Confidence: 0.779273358

00:40:44.473 --> 00:40:46.828 an adolescence where it's huge.

NOTE Confidence: 0.779273358

00:40:46.828 --> 00:40:49.065 Alright, so I suspect that what's

NOTE Confidence: 0.779273358

00:40:49.065 --> 00:40:50.800 happening is that there's overtime

NOTE Confidence: 0.779273358

00:40:50.867 --> 00:40:52.867 developed what we call gene

NOTE Confidence: 0.779273358

00:40:52.867 --> 00:40:54.067 environment correlation really

NOTE Confidence: 0.779273358

00:40:54.067 --> 00:40:56.395 starts to embed itself in parent

NOTE Confidence: 0.779273358

00:40:56.395 --> 00:40:58.220 child interactions which then starts

NOTE Confidence: 0.779273358

00:40:58.220 --> 00:41:01.374 to of course impact on their young

NOTE Confidence: 0.779273358

00:41:01.374 --> 00:41:03.930 persons attachments to those parents.

NOTE Confidence: 0.779273358

00:41:03.930 --> 00:41:05.610 From that point of view it is not

NOTE Confidence: 0.779273358

00:41:05.610 --> 00:41:07.033 intended to mean that there are

NOTE Confidence: 0.779273358

00:41:07.033 --> 00:41:08.785 genes and they go straight into the

NOTE Confidence: 0.779273358

00:41:08.785 --> 00:41:10.145 attachment system in the brain.

NOTE Confidence: 0.779273358

00:41:10.150 --> 00:41:12.172 It's that it's which is possible

NOTE Confidence: 0.779273358

00:41:12.172 --> 00:41:14.881 by the way but but from this point

NOTE Confidence: 0.779273358

00:41:14.881 --> 00:41:16.670 of view what I'm arguing is that.

NOTE Confidence: 0.779273358

00:41:16.670 --> 00:41:18.345 Probably what's happening is that

NOTE Confidence: 0.779273358

00:41:18.345 --> 00:41:19.685 it's that environmental experiences

NOTE Confidence: 0.779273358

00:41:19.685 --> 00:41:21.400 that matter for your feelings of

NOTE Confidence: 0.779273358

00:41:21.400 --> 00:41:23.003 attachment to the people around you

NOTE Confidence: 0.779273358

00:41:23.003 --> 00:41:24.550 start to be influenced by how you

NOTE Confidence: 0.779273358

00:41:24.550 --> 00:41:26.440 manage your interactions with other people.

NOTE Confidence: 0.779273358

00:41:26.440 --> 00:41:28.600 If your tendency is to become

NOTE Confidence: 0.779273358

00:41:28.665 --> 00:41:30.320 hostile and angry and upset,

NOTE Confidence: 0.779273358

00:41:30.320 --> 00:41:32.520 or to go out and do crazy

NOTE Confidence: 0.779273358

00:41:32.520 --> 00:41:33.520 things with your friends,

NOTE Confidence: 0.779273358

00:41:33.520 --> 00:41:34.230 and then your parents get

NOTE Confidence: 0.779273358

00:41:34.230 --> 00:41:35.070 upset with you and so on,

NOTE Confidence: 0.779273358

00:41:35.070 --> 00:41:36.034 these sorts of things,

NOTE Confidence: 0.779273358

00:41:36.034 --> 00:41:37.239 which may be partly genetic,

NOTE Confidence: 0.779273358

00:41:37.240 --> 00:41:39.118 it will impact on your relationships.

NOTE Confidence: 0.779273358

00:41:39.120 --> 00:41:40.600 They may get upset with you and angry.

NOTE Confidence: 0.779273358

00:41:40.600 --> 00:41:41.836 That can then affect how secure

NOTE Confidence: 0.779273358

00:41:41.836 --> 00:41:43.118 you feel with them and so on,

NOTE Confidence: 0.779273358

00:41:43.120 --> 00:41:45.192 and that so you and your personality

NOTE Confidence: 0.779273358

00:41:45.192 --> 00:41:47.000 starts to shape in a much more.

NOTE Confidence: 0.779273358

00:41:47.000 --> 00:41:48.350 Positive way your attachment relationship

NOTE Confidence: 0.779273358

00:41:48.350 --> 00:41:50.539 than it would have done if you were a baby.

NOTE Confidence: 0.779273358

00:41:50.540 --> 00:41:53.440 I think that's pretty plausible.

NOTE Confidence: 0.779273358

00:41:53.440 --> 00:41:54.840 We do have a little bit of

NOTE Confidence: 0.779273358

00:41:54.840 --> 00:41:55.839 evidence in support of that.

NOTE Confidence: 0.779273358

00:41:55.840 --> 00:41:59.128 So just recently my PhD student.

NOTE Confidence: 0.779273358

00:41:59.130 --> 00:42:01.202 Andrea Danesi, which is not there is

NOTE Confidence: 0.779273358

00:42:01.202 --> 00:42:02.699 another Andrea Denesha by the way,

NOTE Confidence: 0.779273358

00:42:02.700 --> 00:42:05.568 but it's not the same one.

NOTE Confidence: 0.779273358

00:42:05.570 --> 00:42:05.943 Yeah,

NOTE Confidence: 0.779273358

00:42:05.943 --> 00:42:08.554 but they're both fantastic and both Italian.

NOTE Confidence: 0.779273358

00:42:08.560 --> 00:42:10.864 And when we, when we looked at sensitivity,

NOTE Confidence: 0.779273358

00:42:10.870 --> 00:42:11.686 I mentioned this earlier,

NOTE Confidence: 0.779273358

00:42:11.686 --> 00:42:13.430 we found that it was like very strong.

NOTE Confidence: 0.779273358

00:42:13.430 --> 00:42:14.846 If you just look at the parenting behavior,

NOTE Confidence: 0.779273358

00:42:14.850 --> 00:42:17.127 it's just you don't see any sign of the

NOTE Confidence: 0.779273358

00:42:17.127 --> 00:42:19.106 child's genes in the variation in that.

NOTE Confidence: 0.779273358

00:42:19.110 --> 00:42:20.550 If you look at adolescence,

NOTE Confidence: 0.779273358

00:42:20.550 --> 00:42:22.410 in adolescence, we coded like, Oh my God,

NOTE Confidence: 0.779273358

00:42:22.410 --> 00:42:23.390 this is a huge amount of work,

NOTE Confidence: 0.779273358

00:42:23.390 --> 00:42:25.310 by the way.

NOTE Confidence: 0.779273358

00:42:25.310 --> 00:42:28.950 More than 1000 observations of

NOTE Confidence: 0.779273358

00:42:28.950 --> 00:42:31.134 adolescent parent interactions.

NOTE Confidence: 0.779273358

00:42:31.140 --> 00:42:33.597 Then what you find is that the

NOTE Confidence: 0.779273358

00:42:33.597 --> 00:42:35.019 sensitivity apparently of the

NOTE Confidence: 0.779273358

00:42:35.019 --> 00:42:36.524 caregiver has a strong kind

NOTE Confidence: 0.779273358

00:42:36.524 --> 00:42:38.610 of imprint on it of the child,

NOTE Confidence: 0.779273358

00:42:38.610 --> 00:42:39.480 the adolescence genetics.

00:42:39.480 --> 00:42:41.938 So you know about 1/3 of the variability

00:42:41.938 --> 00:42:44.134 seemed to be attributable to the

00:42:44.134 --> 00:42:46.094 adolescence genes which is a really

00:42:46.094 --> 00:42:47.977 strong clue that this that the child's

00:42:47.980 --> 00:42:49.445 genes are kind of driving

00:42:49.445 --> 00:42:50.617 some of this interaction.

00:42:50.620 --> 00:42:53.041 And so you know as we said that's what

00:42:53.041 --> 00:42:55.619 we call gene environment correlation.

00:42:55.620 --> 00:42:57.228 We also found what Andrea did

00:42:57.228 --> 00:42:59.669 that if you if you do the same

00:42:59.669 --> 00:43:00.977 analysis you remember that.

00:43:00.980 --> 00:43:04.252 Before where you try and link the the,

00:43:04.252 --> 00:43:06.004 the, the sort of genes or

00:43:06.004 --> 00:43:07.391 environments of sensitivity and he's

00:43:07.391 --> 00:43:08.980 trying to link that to the genes

00:43:08.980 --> 00:43:10.620 and environments of attachment.

NOTE Confidence: 0.868874634444444

00:43:10.620 --> 00:43:12.503 Then he found that about 1/3 of

NOTE Confidence: 0.868874634444444

00:43:12.503 --> 00:43:13.780 the correlation that doesn't,

NOTE Confidence: 0.868874634444444

00:43:13.780 --> 00:43:14.984 it's not easy to see that actually,

NOTE Confidence: 0.868874634444444

00:43:14.990 --> 00:43:17.030 sorry about that but but but about 1/3

NOTE Confidence: 0.868874634444444

00:43:17.030 --> 00:43:18.831 of the correlation between attachment

NOTE Confidence: 0.868874634444444

00:43:18.831 --> 00:43:20.876 and sensitivity in adolescence seem

NOTE Confidence: 0.868874634444444

00:43:20.876 --> 00:43:23.205 to be attributable to common genes

NOTE Confidence: 0.868874634444444

00:43:23.205 --> 00:43:25.383 that are influencing both of those,

NOTE Confidence: 0.868874634444444

00:43:25.390 --> 00:43:26.845 which again really,

NOTE Confidence: 0.868874634444444

00:43:26.845 --> 00:43:29.270 I mean pretty strong cross-sectional

NOTE Confidence: 0.868874634444444

00:43:29.270 --> 00:43:31.329 evidence that genetics are playing

NOTE Confidence: 0.868874634444444

00:43:31.329 --> 00:43:33.507 quite an important role in driving

NOTE Confidence: 0.868874634444444

00:43:33.507 --> 00:43:35.415 caregiving interactions and therefore

NOTE Confidence: 0.868874634444444

00:43:35.415 --> 00:43:37.395 impacting on attachment adolescence.

NOTE Confidence: 0.868874634444444

00:43:37.400 --> 00:43:38.168 OK great.

NOTE Confidence: 0.868874634444444

00:43:38.168 --> 00:43:40.088 So that's that's the attachment

NOTE Confidence: 0.868874634444444

00:43:40.088 --> 00:43:40.856 environment story.

NOTE Confidence: 0.868874634444444

00:43:40.860 --> 00:43:43.471 What it's just very briefly for the

NOTE Confidence: 0.868874634444444

00:43:43.471 --> 00:43:45.826 technical people in the crowd to to

NOTE Confidence: 0.868874634444444

00:43:45.826 --> 00:43:47.920 to just fly one little flag for.

NOTE Confidence: 0.868874634444444

00:43:47.920 --> 00:43:50.160 There's a pretty major caveat on the

NOTE Confidence: 0.868874634444444

00:43:50.160 --> 00:43:52.152 strong statement that I made about

NOTE Confidence: 0.868874634444444

00:43:52.152 --> 00:43:53.777 the absence of genetic influence

NOTE Confidence: 0.868874634444444

00:43:53.777 --> 00:43:55.725 on attachment in infancy which is

NOTE Confidence: 0.868874634444444

00:43:55.725 --> 00:43:57.579 this slightly dry looking slide that

NOTE Confidence: 0.868874634444444

00:43:57.580 --> 00:44:00.310 shows you that the relationship

NOTE Confidence: 0.868874634444444

00:44:00.310 --> 00:44:03.102 between genetic effect sizes and and

NOTE Confidence: 0.868874634444444

00:44:03.102 --> 00:44:05.209 the power to that you would need

NOTE Confidence: 0.868874634444444

00:44:05.209 --> 00:44:07.686 to or the sample size you'd need.

NOTE Confidence: 0.868874634444444

00:44:07.690 --> 00:44:09.544 To reliably detect a genetic and

NOTE Confidence: 0.868874634444444

00:44:09.544 --> 00:44:11.408 effect effect and you can basically

NOTE Confidence: 0.868874634444444

00:44:11.408 --> 00:44:13.656 see on this on this slide here that

NOTE Confidence: 0.868874634444444

00:44:13.716 --> 00:44:15.802 I have a decent chance of detecting

NOTE Confidence: 0.868874634444444

00:44:15.802 --> 00:44:17.498 a genetic effect of somewhere

NOTE Confidence: 0.868874634444444

00:44:17.498 --> 00:44:20.291 between .3 and .2 which is which

NOTE Confidence: 0.868874634444444

00:44:20.291 --> 00:44:23.355 is modest but but not at all tiny.

NOTE Confidence: 0.868874634444444

00:44:23.360 --> 00:44:25.782 You need pretty large samples and and

NOTE Confidence: 0.868874634444444

00:44:25.782 --> 00:44:27.864 quite quickly it you're needing more

NOTE Confidence: 0.868874634444444

00:44:27.864 --> 00:44:30.859 than 500 you might need 1000 or even more.

NOTE Confidence: 0.868874634444444

00:44:30.860 --> 00:44:32.916 So actually the studies we've done so far,

NOTE Confidence: 0.868874634444444

00:44:32.920 --> 00:44:34.288 they're pretty pretty convincing

NOTE Confidence: 0.868874634444444

00:44:34.288 --> 00:44:36.340 at the highest level but they

NOTE Confidence: 0.868874634444444

00:44:36.396 --> 00:44:37.828 absolutely can't rule out.

NOTE Confidence: 0.868874634444444

00:44:37.830 --> 00:44:40.224 Some smaller genetic effects and it would

NOTE Confidence: 0.868874634444444

00:44:40.224 --> 00:44:43.380 be great if more work could be done on that.

NOTE Confidence: 0.868874634444444

00:44:43.380 --> 00:44:43.931 OK,

00:44:43.931 --> 00:44:47.237 last two bits of the story,

00:44:47.240 --> 00:44:47.824 attachment continuity.

00:44:47.824 --> 00:44:49.868 So you remember I said that attachment

00:44:49.868 --> 00:44:51.582 is believed to be very stable over

00:44:51.582 --> 00:44:52.834 time and that it's transmitted

00:44:52.834 --> 00:44:54.556 from one generation to the next.

00:44:54.560 --> 00:44:56.048 So we're going to have a quick look

00:44:56.048 --> 00:44:57.755 at the the first part of that story.

00:44:57.760 --> 00:44:59.885 Part A is about continuity

00:44:59.885 --> 00:45:01.160 over developmental time.

00:45:01.160 --> 00:45:03.374 So from infancy until we haven't

00:45:03.374 --> 00:45:06.350 actually got as far as this guy on the

00:45:06.350 --> 00:45:09.340 right here yet in our longitudinal studies,

00:45:09.340 --> 00:45:10.995 the the longest running studies

00:45:10.995 --> 00:45:13.469 have been about 30 to 35 years so.

00:45:13.470 --> 00:45:14.898 This is like hard work, right?

NOTE Confidence: 0.868874634444444

00:45:14.898 --> 00:45:16.322 I mean, I did one of these studies

NOTE Confidence: 0.868874634444444

00:45:16.322 --> 00:45:17.509 with my colleague Lynn Murray.

NOTE Confidence: 0.868874634444444

00:45:17.510 --> 00:45:18.074 We followed.

NOTE Confidence: 0.868874634444444

00:45:18.074 --> 00:45:19.484 We saw them as babies.

NOTE Confidence: 0.868874634444444

00:45:19.490 --> 00:45:20.306 Now they're like, well,

NOTE Confidence: 0.868874634444444

00:45:20.306 --> 00:45:21.725 the last time I saw them, 22,

NOTE Confidence: 0.868874634444444

00:45:21.725 --> 00:45:23.090 that was a long wait for that,

NOTE Confidence: 0.868874634444444

00:45:23.090 --> 00:45:23.819 for that data.

NOTE Confidence: 0.868874634444444

00:45:23.819 --> 00:45:25.520 So you can see this is quite

NOTE Confidence: 0.868874634444444

00:45:25.583 --> 00:45:26.683 hard research to do.

NOTE Confidence: 0.868874634444444

00:45:26.683 --> 00:45:28.720 But the NIH study that was done

NOTE Confidence: 0.868874634444444

00:45:28.785 --> 00:45:30.780 here in the US is probably the

NOTE Confidence: 0.868874634444444

00:45:30.780 --> 00:45:31.635 best data we've

NOTE Confidence: 0.816774042272727

00:45:31.698 --> 00:45:34.150 got really, on this at the moment.

NOTE Confidence: 0.816774042272727

00:45:34.150 --> 00:45:36.688 So it's worked by calling Booth,

NOTE Confidence: 0.816774042272727

00:45:36.690 --> 00:45:37.563 Laforce, Glenn Roisman,

NOTE Confidence: 0.816774042272727

00:45:37.563 --> 00:45:38.436 people like that.

NOTE Confidence: 0.816774042272727

00:45:38.440 --> 00:45:42.195 Ashley grow 819 of the babies that

NOTE Confidence: 0.816774042272727

00:45:42.195 --> 00:45:43.790 were seen in the strange situation.

NOTE Confidence: 0.816774042272727

00:45:43.790 --> 00:45:46.790 Way back in the 90s.

NOTE Confidence: 0.816774042272727

00:45:46.790 --> 00:45:48.608 Recess for attachment in multiple ways

NOTE Confidence: 0.816774042272727

00:45:48.608 --> 00:45:50.509 in infancy and early childhood and

NOTE Confidence: 0.816774042272727

00:45:50.509 --> 00:45:52.417 then they were assessed for attachment

NOTE Confidence: 0.816774042272727

00:45:52.417 --> 00:45:54.034 using the adult Attachment interview

NOTE Confidence: 0.816774042272727

00:45:54.034 --> 00:45:56.500 at age 18 and they're really important

NOTE Confidence: 0.816774042272727

00:45:56.500 --> 00:45:58.810 kind of strong pretty strong test

NOTE Confidence: 0.816774042272727

00:45:58.880 --> 00:46:01.004 of whether the stability over those

NOTE Confidence: 0.816774042272727

00:46:01.004 --> 00:46:03.330 that over that period of time and

NOTE Confidence: 0.816774042272727

00:46:03.330 --> 00:46:05.290 and this is what the study found.

NOTE Confidence: 0.816774042272727

00:46:05.290 --> 00:46:08.042 That's a tiny correlation.

NOTE Confidence: 0.816774042272727

00:46:08.042 --> 00:46:10.106 Absolutely microscopically small.

NOTE Confidence: 0.816774042272727

00:46:10.110 --> 00:46:13.050 That's the strange situation of 15 months.

NOTE Confidence: 0.816774042272727

00:46:13.050 --> 00:46:16.242 The attachment queue set at age 24 months,

NOTE Confidence: 0.816774042272727

00:46:16.242 --> 00:46:16.924 slightly better,

NOTE Confidence: 0.816774042272727

00:46:16.924 --> 00:46:18.629 a little bit more continuity.

NOTE Confidence: 0.816774042272727

00:46:18.630 --> 00:46:20.040 Still pretty weak,

NOTE Confidence: 0.816774042272727

00:46:20.040 --> 00:46:21.920 but there's something there.

NOTE Confidence: 0.816774042272727

00:46:21.920 --> 00:46:22.850 They touched me,

NOTE Confidence: 0.816774042272727

00:46:22.850 --> 00:46:24.710 said sometimes people worry doesn't isn't

NOTE Confidence: 0.816774042272727

00:46:24.710 --> 00:46:26.618 the cleanest measure of attachment,

NOTE Confidence: 0.816774042272727

00:46:26.620 --> 00:46:28.948 so it could be that there's

NOTE Confidence: 0.816774042272727

00:46:28.948 --> 00:46:30.920 something else sneaking into that.

NOTE Confidence: 0.816774042272727

00:46:30.920 --> 00:46:33.288 And then if you come and then the

NOTE Confidence: 0.816774042272727

00:46:33.288 --> 00:46:35.339 modified strain situation at 36 months,

NOTE Confidence: 0.816774042272727

00:46:35.340 --> 00:46:38.595 even less continuity up until

NOTE Confidence: 0.816774042272727

00:46:38.595 --> 00:46:41.336 age 18 and skip that one.

00:46:41.336 --> 00:46:43.490 I've also just put together all

00:46:43.564 --> 00:46:45.720 of the studies that I know of.

00:46:45.720 --> 00:46:47.170 This isn't the most formalized

00:46:47.170 --> 00:46:48.620 meta analysis I've ever done,

00:46:48.620 --> 00:46:50.210 but but these studies you normally

00:46:50.210 --> 00:46:51.620 know about because they're so few.

00:46:51.620 --> 00:46:54.036 But these are all of the studies so

00:46:54.036 --> 00:46:56.898 far that I know of that have these

00:46:56.898 --> 00:46:59.154 really long term follow-ups over like

00:46:59.154 --> 00:47:02.066 20 years or more from infancy to adulthood.

00:47:02.070 --> 00:47:04.030 And you can cast your eye across that,

00:47:04.030 --> 00:47:05.488 and you can see that they're all pretty low.

00:47:05.490 --> 00:47:06.828 There are a couple of strange,

00:47:06.830 --> 00:47:09.262 very, very high associations.

00:47:09.262 --> 00:47:11.694 But the the oops.

00:47:11.700 --> 00:47:12.100 Doesn't know.

NOTE Confidence: 0.816774042272727

00:47:12.100 --> 00:47:13.516 Oh yeah, sorry, it's at the bottom.

NOTE Confidence: 0.816774042272727

00:47:13.516 --> 00:47:15.392 You can see here it's, it's quite small,

NOTE Confidence: 0.816774042272727

00:47:15.392 --> 00:47:17.096 but the on the text here,

NOTE Confidence: 0.816774042272727

00:47:17.100 --> 00:47:20.484 the meta analytic correlation average is .09,

NOTE Confidence: 0.816774042272727

00:47:20.484 --> 00:47:22.668 which is actually pretty similar to

NOTE Confidence: 0.816774042272727

00:47:22.668 --> 00:47:25.720 what we saw in the Nic HD study itself.

NOTE Confidence: 0.816774042272727

00:47:25.720 --> 00:47:27.856 If you take out one or two of

NOTE Confidence: 0.816774042272727

00:47:27.856 --> 00:47:28.980 the strange looking,

NOTE Confidence: 0.816774042272727

00:47:28.980 --> 00:47:30.590 either the very high or the very

NOTE Confidence: 0.816774042272727

00:47:30.590 --> 00:47:32.080 low effect sizes out of this set,

NOTE Confidence: 0.816774042272727

00:47:32.080 --> 00:47:33.522 just because you think that might be

NOTE Confidence: 0.816774042272727

00:47:33.522 --> 00:47:35.219 throwing it off doesn't make a difference.

NOTE Confidence: 0.816774042272727

00:47:35.220 --> 00:47:36.810 It's still about point O 9,

NOTE Confidence: 0.816774042272727

00:47:36.810 --> 00:47:38.970 something like that.

NOTE Confidence: 0.816774042272727

00:47:38.970 --> 00:47:39.690 So.

NOTE Confidence: 0.816774042272727

00:47:39.690 --> 00:47:42.112 The conclusion now I think really has

NOTE Confidence: 0.816774042272727

00:47:42.112 --> 00:47:44.862 to be that continuity is the exception

NOTE Confidence: 0.816774042272727

00:47:44.862 --> 00:47:47.835 rather than the rule in terms of

NOTE Confidence: 0.816774042272727

00:47:47.835 --> 00:47:50.427 attachment over long stretches of time.

NOTE Confidence: 0.816774042272727

00:47:50.430 --> 00:47:51.530 We know the shorter periods

NOTE Confidence: 0.816774042272727

00:47:51.530 --> 00:47:52.630 of time it's more stable,

NOTE Confidence: 0.816774042272727

00:47:52.630 --> 00:47:54.544 but long term continuity is low

NOTE Confidence: 0.816774042272727

00:47:54.544 --> 00:47:56.730 and there's a lot of change and

NOTE Confidence: 0.816774042272727

00:47:56.730 --> 00:47:59.149 we don't know a lot about the kind

NOTE Confidence: 0.816774042272727

00:47:59.149 --> 00:48:01.104 of processes that drive those

NOTE Confidence: 0.816774042272727

00:48:01.104 --> 00:48:02.960 the continuity and change it.

NOTE Confidence: 0.816774042272727

00:48:02.960 --> 00:48:04.700 You have to say also that

NOTE Confidence: 0.816774042272727

00:48:04.700 --> 00:48:06.299 measurement error and noise of

NOTE Confidence: 0.816774042272727

00:48:06.299 --> 00:48:07.964 course always looks like change.

NOTE Confidence: 0.816774042272727

00:48:07.970 --> 00:48:10.146 So that's and and this keeps coming up.

NOTE Confidence: 0.816774042272727

00:48:10.150 --> 00:48:11.872 It came up already that measurement

NOTE Confidence: 0.816774042272727

00:48:11.872 --> 00:48:14.319 error may be an important factor here,

NOTE Confidence: 0.816774042272727

00:48:14.320 --> 00:48:15.538 so bear that in mind too.

NOTE Confidence: 0.816774042272727

00:48:15.540 --> 00:48:17.619 It's still not going to push these

NOTE Confidence: 0.816774042272727

00:48:17.619 --> 00:48:19.600 correlations from .09 up to .6, right?

NOTE Confidence: 0.816774042272727

00:48:19.600 --> 00:48:20.760 That's not going to happen.

NOTE Confidence: 0.816774042272727

00:48:20.760 --> 00:48:21.852 I don't think so.

NOTE Confidence: 0.816774042272727

00:48:21.852 --> 00:48:23.490 I think we have to conclude

NOTE Confidence: 0.903243776666667

00:48:23.553 --> 00:48:26.812 that that proposition by attachment

NOTE Confidence: 0.903243776666667

00:48:26.812 --> 00:48:29.174 theory theorists that it's,

NOTE Confidence: 0.903243776666667

00:48:29.174 --> 00:48:30.836 you know, highly stable over time,

NOTE Confidence: 0.903243776666667

00:48:30.840 --> 00:48:32.366 is laid down in the first years

NOTE Confidence: 0.903243776666667

00:48:32.366 --> 00:48:33.839 of life and doesn't change.

NOTE Confidence: 0.903243776666667

00:48:33.840 --> 00:48:34.602 It's just wrong.

NOTE Confidence: 0.903243776666667

00:48:34.602 --> 00:48:36.757 That's not going to be as bold as

NOTE Confidence: 0.903243776666667

00:48:36.757 --> 00:48:38.659 saying that's probably just not right.

NOTE Confidence: 0.903243776666667

00:48:38.660 --> 00:48:39.936 Could be wrong, but.

NOTE Confidence: 0.903243776666667

00:48:39.936 --> 00:48:42.110 That's how the data looks to me.

NOTE Confidence: 0.903243776666667

00:48:42.110 --> 00:48:43.664 OK, and then, but that's a very

NOTE Confidence: 0.903243776666667

00:48:43.664 --> 00:48:45.464 different question to the one about

NOTE Confidence: 0.903243776666667

00:48:45.464 --> 00:48:46.186 intergenerational continuity.

NOTE Confidence: 0.903243776666667

00:48:46.190 --> 00:48:49.890 So from parents to child. On.

NOTE Confidence: 0.877500752

00:48:52.580 --> 00:48:54.900 As opposed to child, baby,

NOTE Confidence: 0.877500752

00:48:54.900 --> 00:48:57.092 child to adult child.

NOTE Confidence: 0.877500752

00:48:57.092 --> 00:48:58.736 That makes sense.

NOTE Confidence: 0.877500752

00:48:58.740 --> 00:49:00.402 Marina Spanish and done did did

NOTE Confidence: 0.877500752

00:49:00.402 --> 00:49:02.440 again a great as he always does,

NOTE Confidence: 0.877500752

00:49:02.440 --> 00:49:04.144 a great master analysis of this

NOTE Confidence: 0.877500752

00:49:04.144 --> 00:49:06.650 field at the time that had studied

NOTE Confidence: 0.877500752

00:49:06.650 --> 00:49:08.390 this intergenerational question by

NOTE Confidence: 0.877500752

00:49:08.390 --> 00:49:10.593 measuring attachment in the adult

NOTE Confidence: 0.877500752

00:49:10.593 --> 00:49:12.257 using adult attachment interview,

NOTE Confidence: 0.877500752

00:49:12.260 --> 00:49:13.758 which some of you I'm sure will

NOTE Confidence: 0.877500752

00:49:13.758 --> 00:49:15.260 know won't go into the details,

NOTE Confidence: 0.877500752

00:49:15.260 --> 00:49:16.934 and seeing whether that helps you

NOTE Confidence: 0.877500752

00:49:16.934 --> 00:49:18.698 predict whether the baby will have

NOTE Confidence: 0.877500752

00:49:18.698 --> 00:49:20.178 a secure and insecure attachment.

NOTE Confidence: 0.877500752

00:49:20.180 --> 00:49:22.484 Some of those studies like the the the

NOTE Confidence: 0.877500752

00:49:22.484 --> 00:49:24.440 GREAT study actually done in London

NOTE Confidence: 0.877500752

00:49:24.440 --> 00:49:26.414 by Howard Miriam Steele and Peter

NOTE Confidence: 0.877500752

00:49:26.472 --> 00:49:28.480 Fonagy back in 1991 did those AI?

NOTE Confidence: 0.877500752

00:49:28.480 --> 00:49:29.980 Interviews before the baby was

NOTE Confidence: 0.877500752

00:49:29.980 --> 00:49:31.876 born during pregnancy, and then,

NOTE Confidence: 0.877500752

00:49:31.876 --> 00:49:32.462 you know,

NOTE Confidence: 0.877500752

00:49:32.462 --> 00:49:34.220 followed the baby up when they

NOTE Confidence: 0.877500752

00:49:34.286 --> 00:49:35.990 were one year old and beyond.

NOTE Confidence: 0.877500752

00:49:35.990 --> 00:49:37.200 So the prediction was like,

00:49:37.200 --> 00:49:40.698 you know, before the baby existed.

00:49:40.700 --> 00:49:42.280 And he reviewed those studies,

00:49:42.280 --> 00:49:44.960 have found that nine at the association was,

00:49:44.960 --> 00:49:47.534 well, actually as we look back on it now,

00:49:47.540 --> 00:49:49.644 enormous a correlation of

00:49:49.644 --> 00:49:52.274 .47 is a huge association.

00:49:52.280 --> 00:49:54.590 He also found that caregiving helped us

00:49:54.590 --> 00:49:56.699 understand why that correlation exists,

00:49:56.700 --> 00:49:57.354 so to speak.

00:49:57.354 --> 00:49:58.662 It kind of appeared to mediate

00:49:58.662 --> 00:49:59.839 some of that association,

00:49:59.840 --> 00:50:01.317 but only a small portion of it.

00:50:01.320 --> 00:50:02.934 And there was quite a lot

00:50:02.934 --> 00:50:04.010 that wasn't explained by

00:50:04.067 --> 00:50:05.787 assessments of sensitivity that.

00:50:07.850 --> 00:50:09.194 35% seem to be kind of missing.

NOTE Confidence: 0.870783372857143

00:50:09.200 --> 00:50:10.898 You could find this association between

NOTE Confidence: 0.870783372857143

00:50:10.898 --> 00:50:12.700 the I and attachment of the child,

NOTE Confidence: 0.870783372857143

00:50:12.700 --> 00:50:14.335 but you just couldn't explain

NOTE Confidence: 0.870783372857143

00:50:14.335 --> 00:50:16.613 all of that by just measuring

NOTE Confidence: 0.870783372857143

00:50:16.613 --> 00:50:18.909 sensitive caregiving and venison.

NOTE Confidence: 0.870783372857143

00:50:18.910 --> 00:50:20.046 Doing this great term,

NOTE Confidence: 0.870783372857143

00:50:20.046 --> 00:50:21.466 the transmission gap which kind

NOTE Confidence: 0.870783372857143

00:50:21.466 --> 00:50:22.881 of created this search for

NOTE Confidence: 0.870783372857143

00:50:22.881 --> 00:50:24.495 like what are we missing here,

NOTE Confidence: 0.870783372857143

00:50:24.500 --> 00:50:26.076 what are we still,

NOTE Confidence: 0.870783372857143

00:50:26.076 --> 00:50:29.051 what have we not understood about the

NOTE Confidence: 0.870783372857143

00:50:29.051 --> 00:50:31.706 behavioral causes of of attachment

NOTE Confidence: 0.870783372857143

00:50:31.706 --> 00:50:33.830 differences and that continues.

NOTE Confidence: 0.870783372857143

00:50:33.830 --> 00:50:37.015 We updated this this meta analysis in

NOTE Confidence: 0.870783372857143

00:50:37.020 --> 00:50:39.948 2016 because actually a huge amount

NOTE Confidence: 0.870783372857143

00:50:39.948 --> 00:50:42.390 of research that happened since

NOTE Confidence: 0.870783372857143

00:50:42.390 --> 00:50:46.818 venison dawns earlier paper and also.

NOTE Confidence: 0.870783372857143

00:50:46.820 --> 00:50:49.720 Quite a few of us, in fact.

NOTE Confidence: 0.870783372857143

00:50:49.720 --> 00:50:51.032 This is, this is private, right?

NOTE Confidence: 0.870783372857143

00:50:51.032 --> 00:50:51.760 No one knows this.

NOTE Confidence: 0.870783372857143

00:50:51.760 --> 00:50:54.590 This is not going anywhere.

NOTE Confidence: 0.870783372857143

00:50:54.590 --> 00:50:56.098 Put from the Internet.

NOTE Confidence: 0.870783372857143

00:50:56.098 --> 00:50:57.619 But the the, the,

NOTE Confidence: 0.870783372857143

00:50:57.619 --> 00:51:00.731 the the history of this paper is that

NOTE Confidence: 0.870783372857143

00:51:00.731 --> 00:51:04.114 there was a slightly rowdy dinner at SRCD.

NOTE Confidence: 0.870783372857143

00:51:04.120 --> 00:51:05.614 Myself, color shingle,

NOTE Confidence: 0.870783372857143

00:51:05.614 --> 00:51:06.610 Sherry Madigan,

NOTE Confidence: 0.870783372857143

00:51:06.610 --> 00:51:09.473 some others I think where we started

NOTE Confidence: 0.870783372857143

00:51:09.473 --> 00:51:12.417 confessing that we had file draw studies.

NOTE Confidence: 0.870783372857143

00:51:12.420 --> 00:51:14.259 Like, we had this study, we ran it.

NOTE Confidence: 0.870783372857143

00:51:14.259 --> 00:51:15.960 We didn't understand what happened was really

NOTE Confidence: 0.870783372857143

00:51:16.006 --> 00:51:17.959 no association between the AI and attachment.

NOTE Confidence: 0.870783372857143

00:51:17.960 --> 00:51:18.734 And we didn't really know what

NOTE Confidence: 0.870783372857143

00:51:18.734 --> 00:51:19.250 to do with this.

NOTE Confidence: 0.870783372857143

00:51:19.250 --> 00:51:20.600 And other people started saying,

NOTE Confidence: 0.870783372857143

00:51:20.600 --> 00:51:21.758 yeah, I've had that problem too.

NOTE Confidence: 0.870783372857143

00:51:21.760 --> 00:51:23.028 And we thought we said, well,

NOTE Confidence: 0.870783372857143

00:51:23.028 --> 00:51:24.274 we have to do something about this,

NOTE Confidence: 0.870783372857143

00:51:24.280 --> 00:51:26.560 let's, let's, let's redo the.

NOTE Confidence: 0.870783372857143

00:51:26.560 --> 00:51:28.240 Meta analysis and see whether actually this

NOTE Confidence: 0.870783372857143

00:51:28.240 --> 00:51:30.389 this was a winner's curse kind of problem.

NOTE Confidence: 0.870783372857143

00:51:30.390 --> 00:51:31.834 Maybe, maybe actually some.

NOTE Confidence: 0.870783372857143

00:51:31.834 --> 00:51:32.556 You know,

NOTE Confidence: 0.870783372857143

00:51:32.560 --> 00:51:34.318 maybe the the effect is the

NOTE Confidence: 0.870783372857143

00:51:34.318 --> 00:51:36.170 phenomenon is not as robust as.

NOTE Confidence: 0.870783372857143

00:51:36.170 --> 00:51:38.915 As we believed it to be and we were

NOTE Confidence: 0.870783372857143

00:51:38.915 --> 00:51:42.146 really keen to make sure that we got as

NOTE Confidence: 0.870783372857143

00:51:42.146 --> 00:51:44.390 much unpublished data as as we could,

NOTE Confidence: 0.870783372857143

00:51:44.390 --> 00:51:45.738 so we set off.

NOTE Confidence: 0.870783372857143

00:51:45.738 --> 00:51:47.861 We had a fantastic, huge number of

NOTE Confidence: 0.870783372857143

00:51:47.861 --> 00:51:49.146 people involved in this enterprise.

NOTE Confidence: 0.870783372857143

00:51:49.150 --> 00:51:53.600 It became a brilliant collaboration.

NOTE Confidence: 0.870783372857143

00:51:53.600 --> 00:51:55.370 Called the cats the Cats Consortium

NOTE Confidence: 0.870783372857143

00:51:55.370 --> 00:51:56.900 and it's continued ever since,

NOTE Confidence: 0.870783372857143

00:51:56.900 --> 00:51:59.528 which is really wonderful.

NOTE Confidence: 0.870783372857143

00:51:59.530 --> 00:52:01.035 This is how much things have changed.

NOTE Confidence: 0.870783372857143

00:52:01.040 --> 00:52:03.175 So in 1995 there were 19 studies

NOTE Confidence: 0.870783372857143

00:52:03.175 --> 00:52:04.090 on this subject.

NOTE Confidence: 0.870783372857143

00:52:04.090 --> 00:52:06.106 By 2015 when we reviewed it,

NOTE Confidence: 0.870783372857143

00:52:06.110 --> 00:52:07.710 there were 95 studies.

NOTE Confidence: 0.870783372857143

00:52:07.710 --> 00:52:08.910 So you know,

NOTE Confidence: 0.870783372857143

00:52:08.910 --> 00:52:10.415 just absolutely dwarfed the the

NOTE Confidence: 0.870783372857143

00:52:10.415 --> 00:52:12.279 data that existed when when the

NOTE Confidence: 0.870783372857143

00:52:12.279 --> 00:52:13.809 first measure analysis was done.

NOTE Confidence: 0.870783372857143

00:52:13.810 --> 00:52:16.120 So the potential for the results to

NOTE Confidence: 0.870783372857143

00:52:16.120 --> 00:52:18.088 completely wipe out what we thought

NOTE Confidence: 0.870783372857143

00:52:18.088 --> 00:52:19.924 was were true was fairly high,

NOTE Confidence: 0.870783372857143

00:52:19.930 --> 00:52:22.350 I think.

NOTE Confidence: 0.870783372857143

00:52:22.350 --> 00:52:24.226 The other thing is that more than

NOTE Confidence: 0.870783372857143

00:52:24.226 --> 00:52:26.145 half of the literature we were

NOTE Confidence: 0.870783372857143

00:52:26.145 --> 00:52:27.895 able to get was unpublished.

NOTE Confidence: 0.870783372857143

00:52:27.900 --> 00:52:29.230 Which was also pretty wonderful.

NOTE Confidence: 0.870783372857143

00:52:29.230 --> 00:52:30.490 Actually, we were very lucky,

NOTE Confidence: 0.870783372857143

00:52:30.490 --> 00:52:32.188 but I suppose because it is

NOTE Confidence: 0.870783372857143

00:52:32.188 --> 00:52:33.320 a slightly kind of.

NOTE Confidence: 0.870783372857143

00:52:33.320 --> 00:52:35.259 You know, it's this funny small community,

NOTE Confidence: 0.870783372857143

00:52:35.260 --> 00:52:36.340 so you kind of know everybody.

NOTE Confidence: 0.870783372857143

00:52:36.340 --> 00:52:37.580 So it was possible for us to tap

NOTE Confidence: 0.870783372857143

00:52:37.580 --> 00:52:38.776 most people on the shoulder and say,

NOTE Confidence: 0.870783372857143

00:52:38.780 --> 00:52:40.700 come on guys, you got me.

NOTE Confidence: 0.870783372857143

00:52:40.700 --> 00:52:42.250 You got any data you'd like to share with us?

NOTE Confidence: 0.870783372857143

00:52:42.250 --> 00:52:43.587 And people were really generous with that.

NOTE Confidence: 0.870783372857143

00:52:43.590 --> 00:52:46.630 So we got lots of, we got lots of.

NOTE Confidence: 0.870783372857143

00:52:46.630 --> 00:52:48.860 Unpublished data.

NOTE Confidence: 0.870783372857143

00:52:48.860 --> 00:52:50.456 And this is basically the the the.

NOTE Confidence: 0.870783372857143

00:52:50.460 --> 00:52:51.636 To cut the Long story short,

NOTE Confidence: 0.870783372857143

00:52:51.640 --> 00:52:54.238 we found that the association was

NOTE Confidence: 0.674383463333333

00:52:54.240 --> 00:52:55.419 nevertheless very robust,

NOTE Confidence: 0.674383463333333

00:52:55.419 --> 00:52:56.910 the correlation of .31,

NOTE Confidence: 0.674383463333333

00:52:56.910 --> 00:52:59.974 but it clearly come down a lot from .47.

NOTE Confidence: 0.674383463333333

00:52:59.974 --> 00:53:02.656 I think in hindsight just a

NOTE Confidence: 0.674383463333333

00:53:02.656 --> 00:53:05.738 much more realistic effect size.

NOTE Confidence: 0.674383463333333

00:53:05.740 --> 00:53:07.136 Nevertheless, really quite robust.

NOTE Confidence: 0.674383463333333

00:53:07.136 --> 00:53:09.563 So I remain pretty impressed by how

NOTE Confidence: 0.674383463333333

00:53:09.563 --> 00:53:11.213 consistent that is even though it's

NOTE Confidence: 0.674383463333333

00:53:11.213 --> 00:53:13.774 not the kind of what we might think of

NOTE Confidence: 0.674383463333333

00:53:13.774 --> 00:53:15.350 now as slightly implausible effects

NOTE Confidence: 0.674383463333333

00:53:15.350 --> 00:53:18.402 slices that we saw back in 2000.

NOTE Confidence: 0.674383463333333

00:53:18.402 --> 00:53:19.458 In 1995, Gosh,

NOTE Confidence: 0.674383463333333

00:53:19.458 --> 00:53:21.218 you realize I'm going overtime,

NOTE Confidence: 0.674383463333333

00:53:21.220 --> 00:53:24.076 so I'm just going to quickly.

NOTE Confidence: 0.674383463333333

00:53:24.080 --> 00:53:25.410 Skip ahead to outcomes and

NOTE Confidence: 0.674383463333333

00:53:25.410 --> 00:53:27.024 then call it a day. So.

NOTE Confidence: 0.674383463333333

00:53:27.024 --> 00:53:28.728 And this is actually a short

NOTE Confidence: 0.674383463333333

00:53:28.728 --> 00:53:29.580 but interesting story.

NOTE Confidence: 0.674383463333333

00:53:29.580 --> 00:53:31.948 So we also did a bunch of meta

NOTE Confidence: 0.674383463333333

00:53:31.948 --> 00:53:33.748 analysis on the association

NOTE Confidence: 0.674383463333333

00:53:33.748 --> 00:53:36.008 between attachment and outcomes.

NOTE Confidence: 0.674383463333333

00:53:36.010 --> 00:53:38.410 And started with externalizing

NOTE Confidence: 0.674383463333333

00:53:38.410 --> 00:53:40.210 outcomes like aggression.

NOTE Confidence: 0.674383463333333

00:53:40.210 --> 00:53:41.505 And what is the evidence for that?

NOTE Confidence: 0.674383463333333

00:53:41.510 --> 00:53:44.086 Does that really stand out that children

NOTE Confidence: 0.674383463333333

00:53:44.086 --> 00:53:46.439 know insecure will be more aggressive?

NOTE Confidence: 0.674383463333333

00:53:46.440 --> 00:53:49.760 These were the results again in a nutshell,

NOTE Confidence: 0.674383463333333

00:53:49.760 --> 00:53:51.780 clearly non 0 associations between

NOTE Confidence: 0.674383463333333

00:53:51.780 --> 00:53:53.800 early attachment and in most

NOTE Confidence: 0.674383463333333

00:53:53.867 --> 00:53:55.919 cases later behavioral problems.

NOTE Confidence: 0.674383463333333

00:53:55.920 --> 00:53:57.423 But you can see on the X axis there

NOTE Confidence: 0.674383463333333

00:53:57.423 --> 00:53:58.757 that the effect sizes are small.

NOTE Confidence: 0.674383463333333

00:53:58.760 --> 00:54:00.596 These are kind of standard deviations.

NOTE Confidence: 0.674383463333333

00:54:00.600 --> 00:54:03.113 So the largest effect we saw was

NOTE Confidence: 0.674383463333333

00:54:03.113 --> 00:54:04.513 for disorganized attachment and

NOTE Confidence: 0.674383463333333

00:54:04.513 --> 00:54:06.091 that's just a little bit over

NOTE Confidence: 0.674383463333333

00:54:06.091 --> 00:54:08.079 1/3 of the standard deviation.

NOTE Confidence: 0.674383463333333

00:54:08.080 --> 00:54:09.478 So it's there,

NOTE Confidence: 0.674383463333333

00:54:09.478 --> 00:54:10.876 highly statistically significant,

NOTE Confidence: 0.674383463333333

00:54:10.880 --> 00:54:13.840 but it's not a huge effect size and you

NOTE Confidence: 0.674383463333333

00:54:13.840 --> 00:54:15.400 can see for resistance and avoidance,

NOTE Confidence: 0.674383463333333

00:54:15.400 --> 00:54:17.728 it's really quite small.

NOTE Confidence: 0.674383463333333

00:54:17.730 --> 00:54:19.520 Again significant actually for avoidance

NOTE Confidence: 0.674383463333333

00:54:19.520 --> 00:54:22.150 but not but but but pretty small.

NOTE Confidence: 0.674383463333333

00:54:22.150 --> 00:54:24.766 We also found quite a lot of methodological

NOTE Confidence: 0.674383463333333

00:54:24.766 --> 00:54:26.329 variables were important here.

NOTE Confidence: 0.674383463333333

00:54:26.330 --> 00:54:28.982 So well methodological and

NOTE Confidence: 0.674383463333333

00:54:28.982 --> 00:54:30.308 potentially developmental.

NOTE Confidence: 0.674383463333333

00:54:30.310 --> 00:54:31.444 So older children,

NOTE Confidence: 0.674383463333333

00:54:31.444 --> 00:54:33.334 if you set studied attachment

NOTE Confidence: 0.674383463333333

00:54:33.334 --> 00:54:35.528 later you saw stronger effects.

NOTE Confidence: 0.674383463333333

00:54:35.530 --> 00:54:37.195 If you used measures other

NOTE Confidence: 0.674383463333333

00:54:37.195 --> 00:54:38.527 than the strain situation,

NOTE Confidence: 0.674383463333333

00:54:38.530 --> 00:54:40.002 you saw stronger effects.

NOTE Confidence: 0.674383463333333

00:54:40.002 --> 00:54:42.624 If you use clinical groups or males,

NOTE Confidence: 0.674383463333333

00:54:42.624 --> 00:54:44.946 you tended to see stronger effects.

NOTE Confidence: 0.674383463333333

00:54:44.950 --> 00:54:47.366 So we took to conclude you know more.

NOTE Confidence: 0.674383463333333

00:54:47.370 --> 00:54:47.725 Approximately.

NOTE Confidence: 0.674383463333333

00:54:47.725 --> 00:54:49.855 That development might be important here,

NOTE Confidence: 0.674383463333333

00:54:49.860 --> 00:54:51.715 that things might consolidate over

NOTE Confidence: 0.674383463333333

00:54:51.715 --> 00:54:53.570 time and become more predictable.

NOTE Confidence: 0.674383463333333

00:54:53.570 --> 00:54:55.830 Measurement issues are probably important

NOTE Confidence: 0.674383463333333

00:54:55.830 --> 00:54:59.208 and probably at risk status matters as well.

NOTE Confidence: 0.674383463333333

00:54:59.210 --> 00:55:01.370 We switched to internalizing

NOTE Confidence: 0.674383463333333

00:55:01.370 --> 00:55:03.570 problems and this is what we found.

NOTE Confidence: 0.674383463333333

00:55:03.570 --> 00:55:05.250 Some people said we'd find stronger effects,

NOTE Confidence: 0.674383463333333

00:55:05.250 --> 00:55:06.050 but we didn't at all.

NOTE Confidence: 0.674383463333333

00:55:06.050 --> 00:55:06.536 It was really,

NOTE Confidence: 0.674383463333333

00:55:06.536 --> 00:55:07.670 you can see they're quite a lot

NOTE Confidence: 0.674383463333333

00:55:07.715 --> 00:55:08.987 weaker if you put them side by side.

NOTE Confidence: 0.674383463333333

00:55:08.990 --> 00:55:11.349 It's really clear that those are the

NOTE Confidence: 0.674383463333333

00:55:11.349 --> 00:55:13.170 externalizing effects that we saw before.

NOTE Confidence: 0.674383463333333

00:55:13.170 --> 00:55:16.530 It's like double the size, more or less so.

NOTE Confidence: 0.674383463333333

00:55:16.530 --> 00:55:19.080 Conclusion #2 is really that yes,

NOTE Confidence: 0.674383463333333

00:55:19.080 --> 00:55:21.054 attachment does have some but very

NOTE Confidence: 0.674383463333333

00:55:21.054 --> 00:55:22.838 weak association with internal lens

NOTE Confidence: 0.674383463333333

00:55:22.838 --> 00:55:24.498 internalising outcomes in childhood.

NOTE Confidence: 0.674383463333333

00:55:24.500 --> 00:55:26.980 I have to say that's an important caveat.

NOTE Confidence: 0.674383463333333

00:55:26.980 --> 00:55:28.855 And then finally we ended

NOTE Confidence: 0.674383463333333

00:55:28.855 --> 00:55:29.980 this whole enterprise.

NOTE Confidence: 0.674383463333333

00:55:29.980 --> 00:55:34.336 Of the third of kind of back breaking meta

NOTE Confidence: 0.674383463333333

00:55:34.336 --> 00:55:37.857 analytic syntheses on social competence.

NOTE Confidence: 0.674383463333333

00:55:37.860 --> 00:55:39.504 And this is what we found

NOTE Confidence: 0.674383463333333

00:55:39.504 --> 00:55:41.020 now going in reverse order.

NOTE Confidence: 0.674383463333333

00:55:41.020 --> 00:55:41.761 So if we,

NOTE Confidence: 0.674383463333333

00:55:41.761 --> 00:55:42.996 if we present them together,

NOTE Confidence: 0.674383463333333

00:55:43.000 --> 00:55:43.915 what we found,

NOTE Confidence: 0.674383463333333

00:55:43.915 --> 00:55:45.135 there's the internalizing effect

NOTE Confidence: 0.674383463333333

00:55:45.135 --> 00:55:47.092 sizes that we've seen just a second

NOTE Confidence: 0.674383463333333

00:55:47.092 --> 00:55:48.580 ago that was the smallest effect.

NOTE Confidence: 0.674383463333333

00:55:48.580 --> 00:55:49.637 When you layer on top of that,

NOTE Confidence: 0.674383463333333

00:55:49.640 --> 00:55:51.420 you see the externalizing outcomes.

NOTE Confidence: 0.757332378

00:55:51.420 --> 00:55:52.720 They're quite a lot stronger,

NOTE Confidence: 0.757332378

00:55:52.720 --> 00:55:54.340 but again, not not huge.

NOTE Confidence: 0.757332378

00:55:54.340 --> 00:55:56.580 And then if you look at social competence,

NOTE Confidence: 0.757332378

00:55:56.580 --> 00:55:59.052 that was the strongest association we

NOTE Confidence: 0.757332378

00:55:59.052 --> 00:56:01.664 found across the three metro analysis

NOTE Confidence: 0.757332378

00:56:01.664 --> 00:56:03.448 between insecurity of attachment

NOTE Confidence: 0.757332378

00:56:03.448 --> 00:56:06.199 and an outcome in in childhood.

NOTE Confidence: 0.757332378

00:56:06.200 --> 00:56:08.264 What's also important to point out is that

NOTE Confidence: 0.757332378

00:56:08.264 --> 00:56:09.812 the difference between social competence

NOTE Confidence: 0.757332378

00:56:09.812 --> 00:56:11.774 and externalizing outcomes is not huge.

NOTE Confidence: 0.757332378

00:56:11.780 --> 00:56:13.516 I mean, they're in the same ballpark.

NOTE Confidence: 0.757332378

00:56:13.520 --> 00:56:15.401 So I wouldn't want to make too strong a

NOTE Confidence: 0.757332378

00:56:15.401 --> 00:56:17.387 claim that that's a a more powerful effect,

NOTE Confidence: 0.757332378

00:56:17.390 --> 00:56:18.950 but it does say something about.

NOTE Confidence: 0.757332378

00:56:18.950 --> 00:56:20.318 I suspect it says something important

NOTE Confidence: 0.757332378

00:56:20.318 --> 00:56:21.490 about what attachment is doing,

NOTE Confidence: 0.757332378

00:56:21.490 --> 00:56:23.390 because both externalizing problems,

NOTE Confidence: 0.757332378

00:56:23.390 --> 00:56:25.290 aggression and social competence,

NOTE Confidence: 0.757332378

00:56:25.290 --> 00:56:26.960 they're very kind of socially

NOTE Confidence: 0.757332378

00:56:26.960 --> 00:56:27.628 mediated processes,

NOTE Confidence: 0.757332378

00:56:27.630 --> 00:56:30.206 and it makes sense that attachment would

NOTE Confidence: 0.757332378

00:56:30.206 --> 00:56:32.611 be pretty important in those really

NOTE Confidence: 0.757332378

00:56:32.611 --> 00:56:36.290 important domains of children's functioning.

NOTE Confidence: 0.757332378

00:56:36.290 --> 00:56:37.958 So and then finally important coder

NOTE Confidence: 0.757332378

00:56:37.958 --> 00:56:40.926 on all of this so we we we there is

NOTE Confidence: 0.757332378

00:56:40.926 --> 00:56:42.467 an association between attachment and

NOTE Confidence: 0.757332378

00:56:42.467 --> 00:56:44.165 and behavioral problems but it's not

NOTE Confidence: 0.757332378

00:56:44.165 --> 00:56:46.230 the be all and end all that's that's

NOTE Confidence: 0.757332378

00:56:46.230 --> 00:56:47.751 why there are definitely many other

NOTE Confidence: 0.757332378

00:56:47.751 --> 00:56:49.051 factors that are important attachment

NOTE Confidence: 0.757332378

00:56:49.051 --> 00:56:51.374 is maybe a part of the puzzle and most

NOTE Confidence: 0.757332378

00:56:51.374 --> 00:56:52.609 of this evidence is correlational

NOTE Confidence: 0.757332378

00:56:52.610 --> 00:56:54.298 at this stage but it it it probably

NOTE Confidence: 0.757332378

00:56:54.298 --> 00:56:55.909 plays a there's a good chance it

NOTE Confidence: 0.757332378

00:56:55.909 --> 00:56:58.025 plays a role but it's it's part of

NOTE Confidence: 0.757332378

00:56:58.025 --> 00:56:59.575 a multi determined outcome surprise

NOTE Confidence: 0.757332378

00:56:59.575 --> 00:57:01.040 surprise right what what isn't.

NOTE Confidence: 0.81497582

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00:57:03.500 --> 00:57:05.275 And importantly, all of these

NOTE Confidence: 0.81497582

00:57:05.275 --> 00:57:07.560 studies have looked at one parent.

NOTE Confidence: 0.81497582

00:57:07.560 --> 00:57:08.862 Now, if you have a secure attachment

NOTE Confidence: 0.81497582

00:57:08.862 --> 00:57:10.107 with one parent and an insecure

NOTE Confidence: 0.81497582

00:57:10.107 --> 00:57:11.132 attachment with the other, well,

NOTE Confidence: 0.81497582

00:57:11.132 --> 00:57:12.428 what's that going to do to your outcomes?

NOTE Confidence: 0.81497582

00:57:12.430 --> 00:57:14.002 Right. It's such an obvious question

NOTE Confidence: 0.81497582

00:57:14.002 --> 00:57:15.442 that hadn't really been addressed

NOTE Confidence: 0.81497582

00:57:15.442 --> 00:57:16.838 properly and there's evidence.

NOTE Confidence: 0.81497582

00:57:16.840 --> 00:57:18.388 There's a really nice paper by

NOTE Confidence: 0.81497582

00:57:18.388 --> 00:57:20.470 Kichefski and Kim in 2013 that looked

NOTE Confidence: 0.81497582

00:57:20.470 --> 00:57:22.820 at this and found that, you know,

NOTE Confidence: 0.81497582

00:57:22.820 --> 00:57:24.620 if you had two insecure attachments,

NOTE Confidence: 0.81497582

00:57:24.620 --> 00:57:26.050 that was more strongly associated

NOTE Confidence: 0.81497582

00:57:26.050 --> 00:57:28.196 with an outcome than if you, you know,

NOTE Confidence: 0.81497582

00:57:28.196 --> 00:57:29.564 there was a kind of buffering

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NOTE Confidence: 0.81497582

00:57:29.564 --> 00:57:31.441 process that's going on and our great

NOTE Confidence: 0.81497582

00:57:31.441 --> 00:57:33.523 colleague or Dagan has just recently.

NOTE Confidence: 0.81497582

00:57:33.530 --> 00:57:35.534 Done an independent individual

NOTE Confidence: 0.81497582

00:57:35.534 --> 00:57:37.538 participant database analysis of

NOTE Confidence: 0.81497582

00:57:37.538 --> 00:57:40.021 that those same sorts of studies

NOTE Confidence: 0.81497582

00:57:40.021 --> 00:57:42.597 of about 1000 infants and more or

NOTE Confidence: 0.81497582

00:57:42.597 --> 00:57:44.552 less replicated what could chansky

NOTE Confidence: 0.81497582

00:57:44.552 --> 00:57:46.590 and Kim showed which is that there

NOTE Confidence: 0.81497582

00:57:46.590 --> 00:57:48.050 is some kind of buffering going on.

NOTE Confidence: 0.81497582

00:57:48.050 --> 00:57:50.570 So when we think about the weak

NOTE Confidence: 0.81497582

00:57:50.570 --> 00:57:52.490 associations with attachment and outcomes,

NOTE Confidence: 0.81497582

00:57:52.490 --> 00:57:53.246 we need to bear in mind,

NOTE Confidence: 0.81497582

00:57:53.250 --> 00:57:55.200 well that probably isn't surprising because

NOTE Confidence: 0.81497582

00:57:55.200 --> 00:57:57.329 kids have more than one attachment.

NOTE Confidence: 0.81497582

00:57:57.330 --> 00:58:00.108 Dads, grannies, childcare minders, who knows?

NOTE Confidence: 0.81497582

00:58:00.110 --> 00:58:01.220 I mean actually the other thing

NOTE Confidence: 0.81497582

00:58:01.220 --> 00:58:02.761 that we know for sure from a lot

NOTE Confidence: 0.81497582

00:58:02.761 --> 00:58:03.895 of research is that children can.

NOTE Confidence: 0.81497582

00:58:03.900 --> 00:58:04.845 And multiple attachments.

NOTE Confidence: 0.81497582

00:58:04.845 --> 00:58:06.420 And we've barely scratched the

NOTE Confidence: 0.81497582

00:58:06.420 --> 00:58:07.969 surface of really studying how all

NOTE Confidence: 0.81497582

00:58:07.969 --> 00:58:09.672 of that plays out in a complex

NOTE Confidence: 0.81497582

00:58:09.672 --> 00:58:11.437 developmental system like the family.

NOTE Confidence: 0.81497582

00:58:11.440 --> 00:58:13.792 And that's all work remaining for you

NOTE Confidence: 0.81497582

00:58:13.792 --> 00:58:16.557 guys to do hopefully in the future.

NOTE Confidence: 0.81497582

00:58:16.560 --> 00:58:17.622 And then I better stop. Thank you.

NOTE Confidence: 0.81497582

00:58:17.622 --> 00:58:18.910 I'm sorry for getting a little bit over.

NOTE Confidence: 0.79997218

00:58:30.380 --> 00:58:30.870 So much.

NOTE Confidence: 0.8900231

00:58:33.710 --> 00:58:35.998 So I I think we are just about at time,

NOTE Confidence: 0.892463835

00:58:36.010 --> 00:58:36.682 but if anyone.

NOTE Confidence: 0.892463835

00:58:36.682 --> 00:58:38.250 So if anyone does need to leave,

NOTE Confidence: 0.892463835

00:58:38.250 --> 00:58:39.486 please feel free to do so.

NOTE Confidence: 0.892463835

00:58:39.490 --> 00:58:41.450 If anyone wants to stay and has

NOTE Confidence: 0.892463835

00:58:41.450 --> 00:58:42.730 questions for Doctor Fearon,

NOTE Confidence: 0.892463835

00:58:42.730 --> 00:58:43.835 please raise your hand and

NOTE Confidence: 0.892463835

00:58:43.835 --> 00:58:45.280 we'll take some questions now.

NOTE Confidence: 0.887500675

00:58:53.000 --> 00:58:55.298 Thank you. Very interesting and thorough.

NOTE Confidence: 0.887500675

00:58:55.300 --> 00:58:58.798 I have two questions. One is.

NOTE Confidence: 0.887500675

00:58:58.800 --> 00:59:00.640 You mentioned the personality with

NOTE Confidence: 0.887500675

00:59:00.640 --> 00:59:02.668 the adolescents, but I was curious

NOTE Confidence: 0.887500675

00:59:02.668 --> 00:59:04.278 about temperament with the infants.

NOTE Confidence: 0.887500675

00:59:04.280 --> 00:59:05.978 And you know, we recently had

NOTE Confidence: 0.887500675

00:59:05.978 --> 00:59:08.400 Nathan Fox here and he spoke a lot

NOTE Confidence: 0.887500675

00:59:08.400 --> 00:59:09.940 about temperament as a moderator.

NOTE Confidence: 0.887500675

00:59:09.940 --> 00:59:11.580 So that's question number one.

NOTE Confidence: 0.887500675

00:59:11.580 --> 00:59:14.009 And the second one is what's the

NOTE Confidence: 0.887500675

00:59:14.009 --> 00:59:17.700 latest news on oxytocin and it's.

NOTE Confidence: 0.887500675

00:59:17.700 --> 00:59:21.250 Oh yeah. And so yes,

NOTE Confidence: 0.887500675

00:59:21.250 --> 00:59:23.290 so temperament is a temperament is

NOTE Confidence: 0.887500675

00:59:23.290 --> 00:59:25.912 a complex story because you know

NOTE Confidence: 0.887500675

00:59:25.912 --> 00:59:28.976 temperament itself is not is is multi

NOTE Confidence: 0.887500675

00:59:28.976 --> 00:59:32.000 determined so it has genetic roots but

NOTE Confidence: 0.887500675

00:59:32.088 --> 00:59:35.196 it also has some environmental ones.

NOTE Confidence: 0.887500675

00:59:35.200 --> 00:59:38.504 So it's a little bit unclear what we

NOTE Confidence: 0.887500675

00:59:38.504 --> 00:59:41.738 should expect with respect to temperament.

NOTE Confidence: 0.887500675

00:59:41.740 --> 00:59:42.670 Having said that,

NOTE Confidence: 0.887500675

00:59:42.670 --> 00:59:45.327 the most recent work we've done on that

NOTE Confidence: 0.887500675

00:59:45.327 --> 00:59:47.442 suggests that the association between

NOTE Confidence: 0.887500675

00:59:47.442 --> 00:59:49.500 attachment temperament is is very,

NOTE Confidence: 0.887500675

00:59:49.500 --> 00:59:53.460 is is well is weak to very weak.

NOTE Confidence: 0.887500675

00:59:53.460 --> 00:59:55.364 There is a there is one exception

NOTE Confidence: 0.887500675

00:59:55.364 --> 00:59:57.817 it seems to that which is resistant

00:59:57.817 --> 01:00:00.175 attachment we where we're seeing stronger

01:00:00.241 --> 01:00:02.357 correlations with with temperament.

01:00:02.360 --> 01:00:06.016 So I think that's very interesting and

01:00:06.016 --> 01:00:08.788 it certainly is reason to to consider

01:00:08.788 --> 01:00:10.816 the possibility that temperament is

01:00:10.816 --> 01:00:13.539 playing more of a role in resistance

01:00:13.609 --> 01:00:16.179 attachment than the other categories.

01:00:16.180 --> 01:00:18.716 The the the reason these problems are really

01:00:18.716 --> 01:00:21.678 hard is is how do we know what that means so.

01:00:21.680 --> 01:00:22.292 You know,

01:00:22.292 --> 01:00:24.740 a measure of temperament is asking a parent,

01:00:24.740 --> 01:00:27.720 does your child cry inconsolably?

01:00:27.720 --> 01:00:28.710 You know, regularly across the

01:00:28.710 --> 01:00:30.198 course of the day and when we met,

01:00:30.200 --> 01:00:32.365 when we measure it, ambivalent

01:00:32.365 --> 01:00:34.097 attachment or resistant attachment,

NOTE Confidence: 0.887500675

01:00:34.100 --> 01:00:36.750 we observe children who cry

NOTE Confidence: 0.887500675

01:00:36.750 --> 01:00:38.340 inconsolably in separation,

NOTE Confidence: 0.887500675

01:00:38.340 --> 01:00:39.750 reunion situations.

NOTE Confidence: 0.887500675

01:00:39.750 --> 01:00:44.201 So it's hard to know who gets ownership

NOTE Confidence: 0.887500675

01:00:44.201 --> 01:00:46.350 of this construct right who how do

NOTE Confidence: 0.887500675

01:00:46.413 --> 01:00:48.604 we understand the the nature of the

NOTE Confidence: 0.887500675

01:00:48.604 --> 01:00:50.590 behavior that that we're describing?

NOTE Confidence: 0.887500675

01:00:50.590 --> 01:00:51.336 And and.

NOTE Confidence: 0.887500675

01:00:51.336 --> 01:00:52.828 So at this point,

NOTE Confidence: 0.887500675

01:00:52.830 --> 01:00:55.175 I'm kind of neutral about whether that

NOTE Confidence: 0.887500675

01:00:55.175 --> 01:00:57.529 means that attachment influences temperament,

NOTE Confidence: 0.887500675

01:00:57.530 --> 01:00:58.745 temperament influences attachment.

NOTE Confidence: 0.887500675

01:00:58.745 --> 01:01:00.770 There's some third variable that's

NOTE Confidence: 0.887500675

01:01:00.770 --> 01:01:02.049 influencing better than I'm,

NOTE Confidence: 0.887500675

01:01:02.050 --> 01:01:02.836 I'm not sure.

NOTE Confidence: 0.887500675

01:01:02.836 --> 01:01:05.030 So I think that's a really interesting issue.

NOTE Confidence: 0.887500675

01:01:05.030 --> 01:01:07.781 The other thing is that the resistant

NOTE Confidence: 0.887500675

01:01:07.781 --> 01:01:09.387 classification is usually the

NOTE Confidence: 0.887500675

01:01:09.387 --> 01:01:11.529 smallest group within any one study.

NOTE Confidence: 0.887500675

01:01:11.530 --> 01:01:13.833 So our level of uncertainty about the

NOTE Confidence: 0.887500675

01:01:13.833 --> 01:01:16.346 causes of that is by far the greatest,

NOTE Confidence: 0.887500675

01:01:16.350 --> 01:01:17.205 I would say,

NOTE Confidence: 0.887500675

01:01:17.205 --> 01:01:20.270 of all of the sort of types of attachment.

NOTE Confidence: 0.887500675

01:01:20.270 --> 01:01:21.790 So for example, in our.

NOTE Confidence: 0.887500675

01:01:21.790 --> 01:01:22.450 Twin studies,

NOTE Confidence: 0.887500675

01:01:22.450 --> 01:01:24.760 we would never have had power to

NOTE Confidence: 0.887500675

01:01:24.760 --> 01:01:26.296 specifically look at resistant

NOTE Confidence: 0.887500675

01:01:26.296 --> 01:01:28.582 attachment and know what the genetic

NOTE Confidence: 0.887500675

01:01:28.582 --> 01:01:29.859 contributions might be there.

NOTE Confidence: 0.887500675

01:01:29.860 --> 01:01:31.996 So I would absolutely not rule

NOTE Confidence: 0.887500675

01:01:31.996 --> 01:01:33.420 out the possibility that.

NOTE Confidence: 0.887500675

01:01:33.420 --> 01:01:35.490 That particular pattern of of

NOTE Confidence: 0.887500675

01:01:35.490 --> 01:01:38.517 of behaviour has more of a kind

NOTE Confidence: 0.887500675

01:01:38.517 --> 01:01:39.906 of temperamental underpinning to

NOTE Confidence: 0.887500675

01:01:39.906 --> 01:01:40.918 it than the others.

NOTE Confidence: 0.887500675

01:01:40.920 --> 01:01:43.839 We just don't know at this stage.

NOTE Confidence: 0.887500675

01:01:43.840 --> 01:01:45.364 On the oxytocin, I think probably

NOTE Confidence: 0.887500675

01:01:45.364 --> 01:01:46.779 others are better placed than me.

NOTE Confidence: 0.887500675

01:01:46.780 --> 01:01:49.314 I would I suspect to answer that

NOTE Confidence: 0.887500675

01:01:49.320 --> 01:01:52.212 that question there have not been.

NOTE Confidence: 0.887500675

01:01:52.212 --> 01:01:52.598 I mean,

NOTE Confidence: 0.887500675

01:01:52.600 --> 01:01:54.697 obviously Ruth Feldman does a lot of the the,

NOTE Confidence: 0.887500675

01:01:54.700 --> 01:01:57.250 the, the really. Right, right.

NOTE Confidence: 0.887500675

01:01:57.250 --> 01:01:57.882 Yeah.

NOTE Confidence: 0.887500675

01:01:57.882 --> 01:02:01.674 So it's such a big question.

NOTE Confidence: 0.887500675

01:02:01.680 --> 01:02:01.958 Yeah,

NOTE Confidence: 0.887500675

01:02:01.958 --> 01:02:02.514 I mean,

NOTE Confidence: 0.887500675

01:02:02.514 --> 01:02:04.460 maybe that's sort of more like another

NOTE Confidence: 0.783859015454545

01:02:04.521 --> 01:02:04.950 lecture.

NOTE Confidence: 0.825485058235294

01:02:10.330 --> 01:02:11.518 I'll tell you what I would can I use

NOTE Confidence: 0.825485058235294

01:02:11.518 --> 01:02:12.868 it as an excuse to say something else,

NOTE Confidence: 0.825485058235294

01:02:12.870 --> 01:02:16.616 which is that one thing that we do not study

NOTE Confidence: 0.825485058235294

01:02:16.616 --> 01:02:19.630 at all and it's so obviously important,

NOTE Confidence: 0.825485058235294

01:02:19.630 --> 01:02:21.562 is how attachments develop.

NOTE Confidence: 0.825485058235294

01:02:21.562 --> 01:02:24.150 I mean, we just don't do that.

NOTE Confidence: 0.825485058235294

01:02:24.150 --> 01:02:26.888 Emerson and Schaefer back in 1964 did that.

NOTE Confidence: 0.825485058235294

01:02:26.888 --> 01:02:28.330 They would look at a baby that

NOTE Confidence: 0.825485058235294

01:02:28.378 --> 01:02:29.858 didn't have an attachment, right.

NOTE Confidence: 0.825485058235294

01:02:29.858 --> 01:02:31.874 So you babies don't show selective attachment

NOTE Confidence: 0.825485058235294

01:02:31.874 --> 01:02:33.507 behavior when they're two months old.

NOTE Confidence: 0.825485058235294

01:02:33.510 --> 01:02:35.082 It starts to emerge gradually and

NOTE Confidence: 0.825485058235294

01:02:35.082 --> 01:02:36.640 it's really clear by about six

NOTE Confidence: 0.825485058235294

01:02:36.640 --> 01:02:38.229 or seven or eight months of age.

NOTE Confidence: 0.825485058235294

01:02:38.230 --> 01:02:40.470 And we know so little about what,

NOTE Confidence: 0.825485058235294

01:02:40.470 --> 01:02:42.348 yeah, I guess I've become even,

NOTE Confidence: 0.825485058235294

01:02:42.350 --> 01:02:44.782 but I think that probably those

NOTE Confidence: 0.825485058235294

01:02:44.782 --> 01:02:46.742 the psychobiology of that emerging

NOTE Confidence: 0.825485058235294

01:02:46.742 --> 01:02:48.310 developmental process is really,

NOTE Confidence: 0.825485058235294

01:02:48.310 --> 01:02:49.372 really important and we've done so

NOTE Confidence: 0.825485058235294

01:02:49.372 --> 01:02:50.998 little on that. But yeah, go ahead.

NOTE Confidence: 0.8466327

01:02:54.280 --> 01:02:54.840 Right.

NOTE Confidence: 0.892079968

01:02:57.380 --> 01:02:59.420 Yeah, exactly. So those, yeah, right.

NOTE Confidence: 0.892079968

01:02:59.420 --> 01:03:01.020 And those that those,

NOTE Confidence: 0.892079968

01:03:01.020 --> 01:03:03.547 those questions have more has been just

NOTE Confidence: 0.892079968

01:03:03.547 --> 01:03:06.036 like put to sleep since 1960 and we

NOTE Confidence: 0.892079968

01:03:06.036 --> 01:03:07.500 really don't understand that at all.

NOTE Confidence: 0.892079968

01:03:07.500 --> 01:03:09.600 I'm sure that's where oxytocin and you

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NOTE Confidence: 0.892079968

01:03:09.600 --> 01:03:12.050 know the the sort of psychobiology of

NOTE Confidence: 0.892079968

01:03:12.050 --> 01:03:14.276 care that the animal researchers study

NOTE Confidence: 0.892079968

01:03:14.280 --> 01:03:15.840 is probably really, really important.

NOTE Confidence: 0.892079968

01:03:15.840 --> 01:03:17.226 But we don't even have the tools

NOTE Confidence: 0.892079968

01:03:17.226 --> 01:03:19.040 to do it that well, you know,

NOTE Confidence: 0.892079968

01:03:19.040 --> 01:03:21.080 the strange situation assumes that there

NOTE Confidence: 0.892079968

01:03:21.080 --> 01:03:23.012 is already an established attachment

NOTE Confidence: 0.892079968

01:03:23.012 --> 01:03:24.992 and there aren't actually brilliant

NOTE Confidence: 0.892079968

01:03:24.992 --> 01:03:26.973 tools for studying it but, but.

NOTE Confidence: 0.892079968

01:03:26.973 --> 01:03:28.604 That doesn't mean we can't come up

NOTE Confidence: 0.892079968

01:03:28.604 --> 01:03:29.468 with them, right?

NOTE Confidence: 0.892079968

01:03:29.468 --> 01:03:32.254 We could definitely come up with them.

NOTE Confidence: 0.892079968

01:03:32.260 --> 01:03:32.740 Say that.

NOTE Confidence: 0.922766048333333

01:03:37.980 --> 01:03:40.003 I just wanted to say that having

NOTE Confidence: 0.922766048333333

01:03:40.003 --> 01:03:41.459 studied this for 40 years,

NOTE Confidence: 0.922766048333333

01:03:41.460 --> 01:03:42.630 this was a phenomenal talk

NOTE Confidence: 0.922766048333333

01:03:42.630 --> 01:03:44.100 and I thank you very much.

NOTE Confidence: 0.922766048333333

01:03:44.100 --> 01:03:46.068 It was just a Tour de force and

NOTE Confidence: 0.922766048333333

01:03:46.068 --> 01:03:48.308 I learned so much, so thank you.

NOTE Confidence: 0.881413487142857

01:03:51.090 --> 01:03:53.500 That means a lot coming from you. Thank you,

NOTE Confidence: 0.73281523

01:03:53.510 --> 01:03:55.586 Mr How do I follow that?

NOTE Confidence: 0.73281523

01:03:55.590 --> 01:03:57.238 You could say it was rubbish.

NOTE Confidence: 0.9291543625

01:04:00.140 --> 01:04:02.608 So my question is.

NOTE Confidence: 0.9291543625

01:04:02.610 --> 01:04:05.402 He talked about a lack of continuity in

NOTE Confidence: 0.9291543625

01:04:05.402 --> 01:04:07.940 attachment from childhood to adulthood,

NOTE Confidence: 0.9291543625

01:04:07.940 --> 01:04:09.880 and I'm wondering if it's an

NOTE Confidence: 0.9291543625

01:04:09.880 --> 01:04:11.799 issue of methods in that.

NOTE Confidence: 0.9291543625

01:04:11.799 --> 01:04:13.413 And I I think we've probably

NOTE Confidence: 0.9291543625

01:04:13.413 --> 01:04:14.799 talked about this years ago,

NOTE Confidence: 0.9291543625

01:04:14.800 --> 01:04:17.054 but I just just cured to me

NOTE Confidence: 0.9291543625

01:04:17.054 --> 01:04:18.620 that the strange situation is

NOTE Confidence: 0.9291543625

01:04:18.620 --> 01:04:20.170 really about reunions and the

NOTE Confidence: 0.9291543625

01:04:20.170 --> 01:04:21.737 AI is not about reunions.

NOTE Confidence: 0.9291543625

01:04:21.740 --> 01:04:23.270 And so if people looked at that,

NOTE Confidence: 0.9291543625

01:04:23.270 --> 01:04:24.280 are they looking at reunions

NOTE Confidence: 0.9291543625

01:04:24.280 --> 01:04:25.525 and other context and trying to

NOTE Confidence: 0.9291543625

01:04:25.525 --> 01:04:26.470 look at continuity there? Or

NOTE Confidence: 0.840511992666667

01:04:26.480 --> 01:04:29.432 yeah, I would, it would be so great

NOTE Confidence: 0.840511992666667

01:04:29.432 --> 01:04:31.859 if someone were to do that the.

NOTE Confidence: 0.840511992666667

01:04:31.860 --> 01:04:33.492 The the methodology I I think

NOTE Confidence: 0.840511992666667

01:04:33.492 --> 01:04:35.050 this is like absolutely crucial.

NOTE Confidence: 0.77473718625

01:04:37.300 --> 01:04:38.488 It's it's part, yeah.

NOTE Confidence: 0.77473718625

01:04:38.488 --> 01:04:39.676 It's partly about reunions.

NOTE Confidence: 0.77473718625

01:04:39.680 --> 01:04:42.158 It's also partly about just even

NOTE Confidence: 0.77473718625

01:04:42.158 --> 01:04:43.810 more generally attachment behavior.

NOTE Confidence: 0.77473718625

01:04:43.810 --> 01:04:45.666 So as as, as, as like I said,

NOTE Confidence: 0.77473718625

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01:04:45.670 --> 01:04:47.091 as someone who started off more in

NOTE Confidence: 0.77473718625

01:04:47.091 --> 01:04:48.850 the kind of behavioral ecology world,

NOTE Confidence: 0.77473718625

01:04:48.850 --> 01:04:50.530 if I don't see well defined behavior,

NOTE Confidence: 0.77473718625

01:04:50.530 --> 01:04:51.126 I'm nervous.

NOTE Confidence: 0.77473718625

01:04:51.126 --> 01:04:52.914 Yeah, the adult attachment interview to

NOTE Confidence: 0.77473718625

01:04:52.914 --> 01:04:55.209 me is like a deeply interesting thing,

NOTE Confidence: 0.77473718625

01:04:55.210 --> 01:04:56.800 but I'm not sure what the

NOTE Confidence: 0.77473718625

01:04:56.800 --> 01:04:58.330 behavior is that I'm seeing.

NOTE Confidence: 0.77473718625

01:04:58.330 --> 01:04:59.858 And as you say,

NOTE Confidence: 0.77473718625

01:04:59.858 --> 01:05:01.386 it certainly doesn't have

NOTE Confidence: 0.77473718625

01:05:01.386 --> 01:05:03.366 clear proximity seeking in it.

NOTE Confidence: 0.77473718625

01:05:03.366 --> 01:05:06.449 It there isn't a clear separation or union.

NOTE Confidence: 0.77473718625

01:05:06.450 --> 01:05:09.424 So we are in a sense, in my view,

NOTE Confidence: 0.77473718625

01:05:09.424 --> 01:05:10.852 detached from some of the things

NOTE Confidence: 0.77473718625

01:05:10.852 --> 01:05:12.501 that give us confidence about the

NOTE Confidence: 0.77473718625

01:05:12.501 --> 01:05:14.350 meaning and function of the behavior,

NOTE Confidence: 0.77473718625

01:05:14.350 --> 01:05:15.007 which is where.

NOTE Confidence: 0.77473718625

01:05:15.007 --> 01:05:16.870 A lot of the work that Bobby did

NOTE Confidence: 0.77473718625

01:05:16.870 --> 01:05:18.514 inspired by people like Robert Hind

NOTE Confidence: 0.77473718625

01:05:18.514 --> 01:05:20.437 who really knew how to do this stuff.

NOTE Confidence: 0.77473718625

01:05:20.440 --> 01:05:22.120 You know that's where they started.

NOTE Confidence: 0.77473718625

01:05:22.120 --> 01:05:24.066 So I do think that's a genuine

NOTE Confidence: 0.77473718625

01:05:24.066 --> 01:05:26.134 possibility that that the AI is

NOTE Confidence: 0.77473718625

01:05:26.134 --> 01:05:27.698 measuring something different not

NOTE Confidence: 0.77473718625

01:05:27.698 --> 01:05:29.268 something unimportant because it

NOTE Confidence: 0.77473718625

01:05:29.268 --> 01:05:30.973 you know it's something really

NOTE Confidence: 0.77473718625

01:05:30.973 --> 01:05:33.139 interesting about don't say that

NOTE Confidence: 0.77473718625

01:05:33.140 --> 01:05:36.227 but it's but it's just may not

NOTE Confidence: 0.77473718625

01:05:36.227 --> 01:05:38.220 be attachment behavior itself.

NOTE Confidence: 0.77473718625

01:05:38.220 --> 01:05:39.893 And then the question is well how

NOTE Confidence: 0.77473718625

01:05:39.893 --> 01:05:41.215 would you study separation and

NOTE Confidence: 0.77473718625

01:05:41.215 --> 01:05:42.883 reunions in teenagers or in in

NOTE Confidence: 0.77473718625

01:05:42.883 --> 01:05:44.659 although we saw a great video right.

NOTE Confidence: 0.77473718625

01:05:44.660 --> 01:05:46.284 I mean that was.

NOTE Confidence: 0.77473718625

01:05:46.284 --> 01:05:48.214 But sending their dads off to be

NOTE Confidence: 0.77473718625

01:05:48.214 --> 01:05:49.700 deployed for six months is never

NOTE Confidence: 0.77473718625

01:05:49.700 --> 01:05:51.142 going to get you past an IRB.

NOTE Confidence: 0.77473718625

01:05:51.150 --> 01:05:54.244 So the question is how to get

NOTE Confidence: 0.77473718625

01:05:54.244 --> 01:05:56.309 good experimental handle on that?

NOTE Confidence: 0.77473718625

01:05:56.310 --> 01:05:59.090 On on isomorphism? Isomorphic behavior?

NOTE Confidence: 0.740631015

01:06:01.250 --> 01:06:02.814 With adults, you know you see

NOTE Confidence: 0.740631015

01:06:02.814 --> 01:06:04.050 in on the playground some kids

NOTE Confidence: 0.800092762222222

01:06:04.096 --> 01:06:05.720 have a hard time and then they hover,

NOTE Confidence: 0.800092762222222

01:06:05.720 --> 01:06:07.486 they don't go back in or you

NOTE Confidence: 0.800092762222222

01:06:07.486 --> 01:06:08.854 in a in a couples relationship

NOTE Confidence: 0.800092762222222

01:06:08.854 --> 01:06:10.247 with things are not going well.

NOTE Confidence: 0.800092762222222

01:06:10.250 --> 01:06:12.340 You know they make up or does it stay

NOTE Confidence: 0.808962251666667

01:06:12.350 --> 01:06:14.168 you know I think I think that's the kind

NOTE Confidence: 0.808962251666667

01:06:14.168 --> 01:06:16.304 of territory that we need to be looking at.

NOTE Confidence: 0.808962251666667

01:06:16.310 --> 01:06:18.256 I completely agree. I don't know if

NOTE Confidence: 0.808962251666667

01:06:18.256 --> 01:06:20.519 you ever ever at Waters has done some

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01:06:20.519 --> 01:06:22.680 nice coding of couple of interactions.

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01:06:22.680 --> 01:06:24.752 Where he explicitly tries to codify the

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01:06:24.752 --> 01:06:26.739 behavior as being attachment behavior.

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01:06:26.740 --> 01:06:29.218 So you know you're feeling distressed,

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01:06:29.220 --> 01:06:31.080 so do you. In what way do you kind of

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01:06:31.136 --> 01:06:33.145 reach out and try to create psychological

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01:06:33.145 --> 01:06:35.117 proximity or it may even be physical,

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01:06:35.120 --> 01:06:37.880 actually, of course with with your

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01:06:37.880 --> 01:06:40.452 partner and to me that's a that's a better

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01:06:40.452 --> 01:06:41.666 approximation for explicit attachment

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01:06:41.666 --> 01:06:44.186 behavior than what is happening in the AI,

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135

01:06:44.190 --> 01:06:46.296 which is something much kind of

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01:06:46.296 --> 01:06:47.700 more complex and psychological.

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01:06:47.700 --> 01:06:50.895 So I think I think there's a lot of

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01:06:50.895 --> 01:06:53.192 potential there there and there have been.

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01:06:53.192 --> 01:06:54.450 Some studies, not enough of them,

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01:06:54.450 --> 01:06:57.644 I think, to be able to sort of conclude

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01:06:57.644 --> 01:06:59.739 that the continuity is higher.

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01:06:59.740 --> 01:07:01.216 If you measure it like this,

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01:07:01.220 --> 01:07:03.126 then if you measured it using AI,

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01:07:03.126 --> 01:07:04.704 but that that is a possibility.

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01:07:04.710 --> 01:07:06.162 That has certainly been one study

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01:07:06.162 --> 01:07:07.840 I can think of from Everett,

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01:07:07.840 --> 01:07:09.358 Wash this team that suggests that

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01:07:09.358 --> 01:07:10.900 reasonably high level of continuity.

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01:07:10.900 --> 01:07:14.250 So I think that is an important way to go.

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01:07:14.250 --> 01:07:16.010 Great. Well, we're out of time,

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01:07:16.010 --> 01:07:18.698 so I'd like to thank you and appreciate

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01:07:18.710 --> 01:07:19.640 a wonderful talk.