

Allt fler får neuropsykiatriska diagnoser

- epidemiologiska funderingar

Andrea Markkula, BUP Region Jönköpings Län

Andrea Markkula

- ST-läkare BUP Ryhov, Region Jönköpings Län
- *Post doc* på *KIND*, Karolinska Universitetet



KIND

CENTER OF NEURODEVELOPMENTAL
DISORDERS AT KAROLINSKA INSTITUTET

Intresseområden

- Barn och ungdomar
- Neuropsykiatri
- Epidemiologi

Kajsa Igelström



Sven Bölte



Andrea Markkula



He Zhang

Causal Mediation Analysis
 Quasi-Bayesian Confidence Intervals

	Estimate	95% CI Lower	95% CI Upper	p-value
ACME	-0.00842	-0.01445	0.00	<2e-16 ***
ADE	-0.23139	-0.26019	-0.20	<2e-16 ***
Total Effect	-0.23981	-0.26942	-0.21	<2e-16 ***
Prop. Mediated	0.03431	0.01459	0.06	<2e-16 ***

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
 Sample Size Used: 5400
 Simulations: 2000



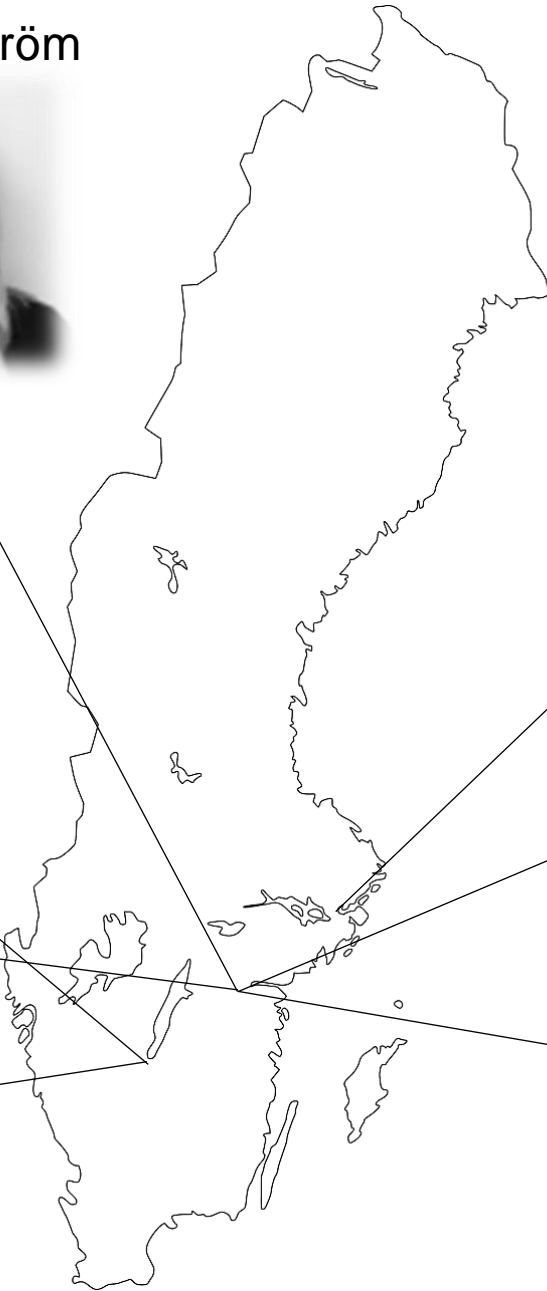
Andrea Johansson Capusan



Berit Gustafsson



Per A Gustafsson



Epidemiologi – det bästa som finns!

- “distribution and determinants of health-related states among specified populations and the application of that study to the control of health problems.”
- Bild av verkligheten
- Deckarhistoria (hur hänger allt ihop?)
- Viktigt med bra statistik
- Viktigt att kunna tolka



DN DEBATT

DN Debatt. "Det är något som skaver med antalet NPF-diagnoser"



MARCH 3, 2017 | 6 MIN READ

The Real Reasons Autism Rates Are Up in the U.S.

A hard look at whether the rise comes from more awareness, better diagnosis—or something else

BY JESSICA WRIGHT & SPECTRUM

[Start](#) > [Om Socialstyrelsen](#) > [Pressrum](#) > [Pressmeddelanden och nyheter](#) > [Fortsatt kraftig ökning](#)

Fortsatt kraftig ökning av adhd-diagnoser

Publicerad: 2023-11-28 kl. 09:00

Autism rates have tripled. Is it now more common or are we just better at diagnosis?

New research suggests doctors have improved at identifying autism, especially among children with average or above-average IQs. But that doesn't fully explain the trend.

"Orimlig ökning av adhd-diagnoser"

KULTUR | KOMMENTAR

Roland Paulsen: Är min avsky för att mingla på fester ett tecken på autism?



Autism





Genetic and environmental contributions to co-occurring physical health conditions in autism spectrum condition and attention-deficit/hyperactivity disorder

Pei-Yin Pan^{1*}, Mark J. Taylor², Henrik Larsson², Catarina Almqvist^{2,3}, Paul Lichtenstein², Sebastian Lundström^{4,5} and Sven Bölte^{1,6,7}

Secular changes in the symptom level of clinically diagnosed autism

Olof Arvidsson,¹ Christopher Gillberg,¹ Paul Lichtenstein,² and Sebastian Lundström^{1,3}

¹Gillberg Neuropsychiatry Centre, University of Gothenburg, Gothenburg; ²Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm; ³Centre for Ethics, Law and Mental Health, University of Gothenburg, Gothenburg, Sweden

Time trends in autism diagnosis over 20 years: a UK population-based cohort study

Ginny Russell,¹ Sal Stapley,¹ Tamsin Newlove-Delgado,¹ Andrew Salmon,^{1*} Rhianna White,² Fiona Warren,¹ Anita Pearson,³ and Tamsin Ford⁴

Perceived child impairment and the 'autism epidemic'

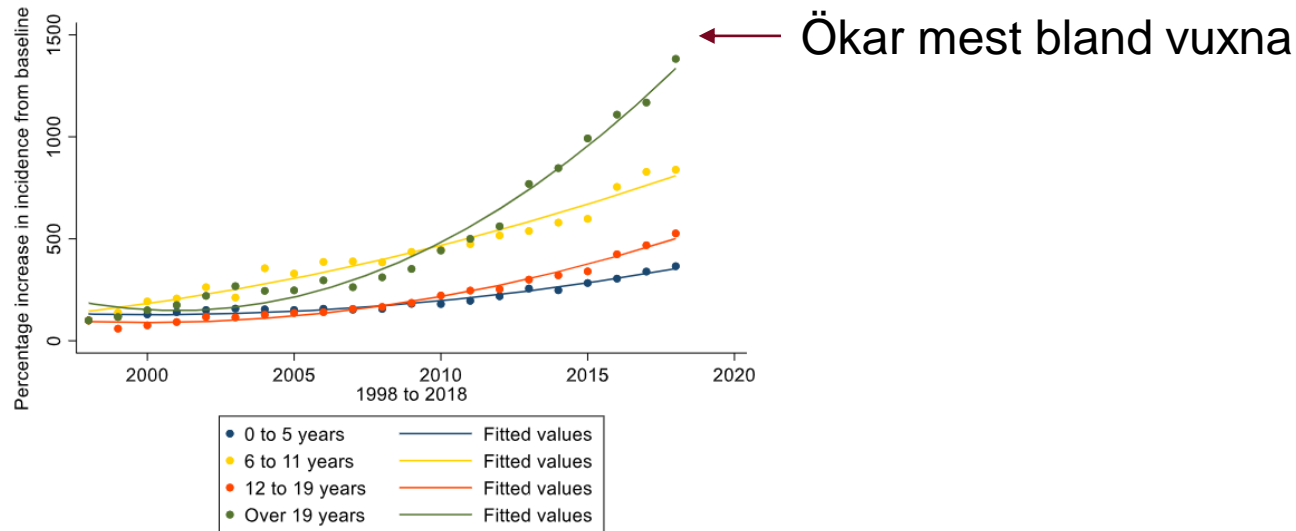
Sebastian Lundström,^{1,2} Mark Taylor,³ Henrik Larsson,³ Paul Lichtenstein,³ Ralf Kuja-Halkola,³ and Christopher Gillberg¹

¹Gillberg Neuropsychiatry Centre, Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden; ²Center for Ethics, Law and Mental health (CELAM), Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden; ³Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden

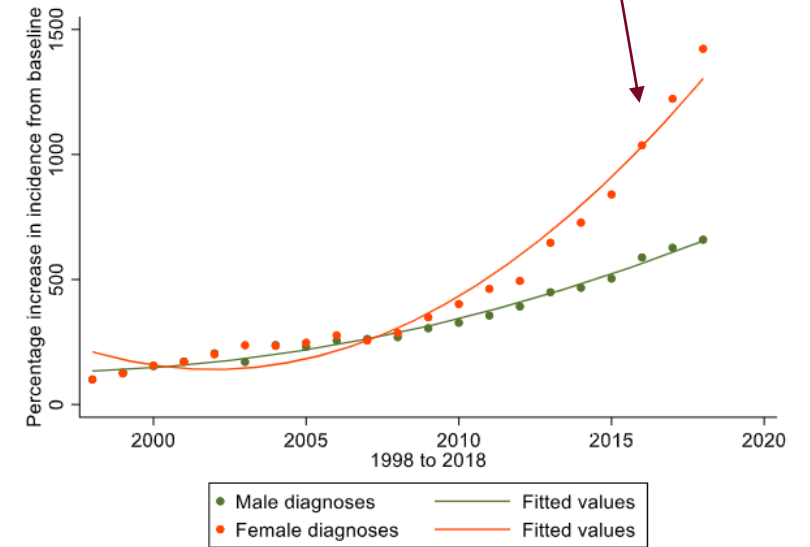
Time trends in autism diagnosis over 20 years: a UK population-based cohort study

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Rhianna White,²  Fiona Warren,¹  Anita Pearson,³ and Tamsin Ford⁴ **

(i) : Percentage increase in incidence of autism diagnosis from 1998 to 2018 by age-band.



(ii): By gender.



CATSS-studien

- Alla tvillingpar födda sedan juli 1992
- Återkommande intervjuer om kroppslig och psykisk hälsa, personlighetsdrag osv
- Även validerade screeningformulär för Autism/ADHD
- Extra info från offentliga register



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Vanliga besvär autism/ADHD

- Funktionella magbesvär
- Olika sorters huvudvärk
- Epilepsi
- Immunologiska (tex celiaki)

Ökad risk för samma sjukdomar

- Också "sub-treshold" ADHD/autism
- Sannolikt samlad genetisk faktor

Autism Spectrum Disorders and Autisticlike Traits

Similar Etiology in the Extreme End and the Normal Variation

Sebastian Lundström, PhD; Zheng Chang, MSc; Maria Råstam, MD, PhD; Christopher Gillberg, MD, PhD;
Henrik Larsson, PhD; Henrik Anckarsäter, MD, PhD; Paul Lichtenstein, PhD

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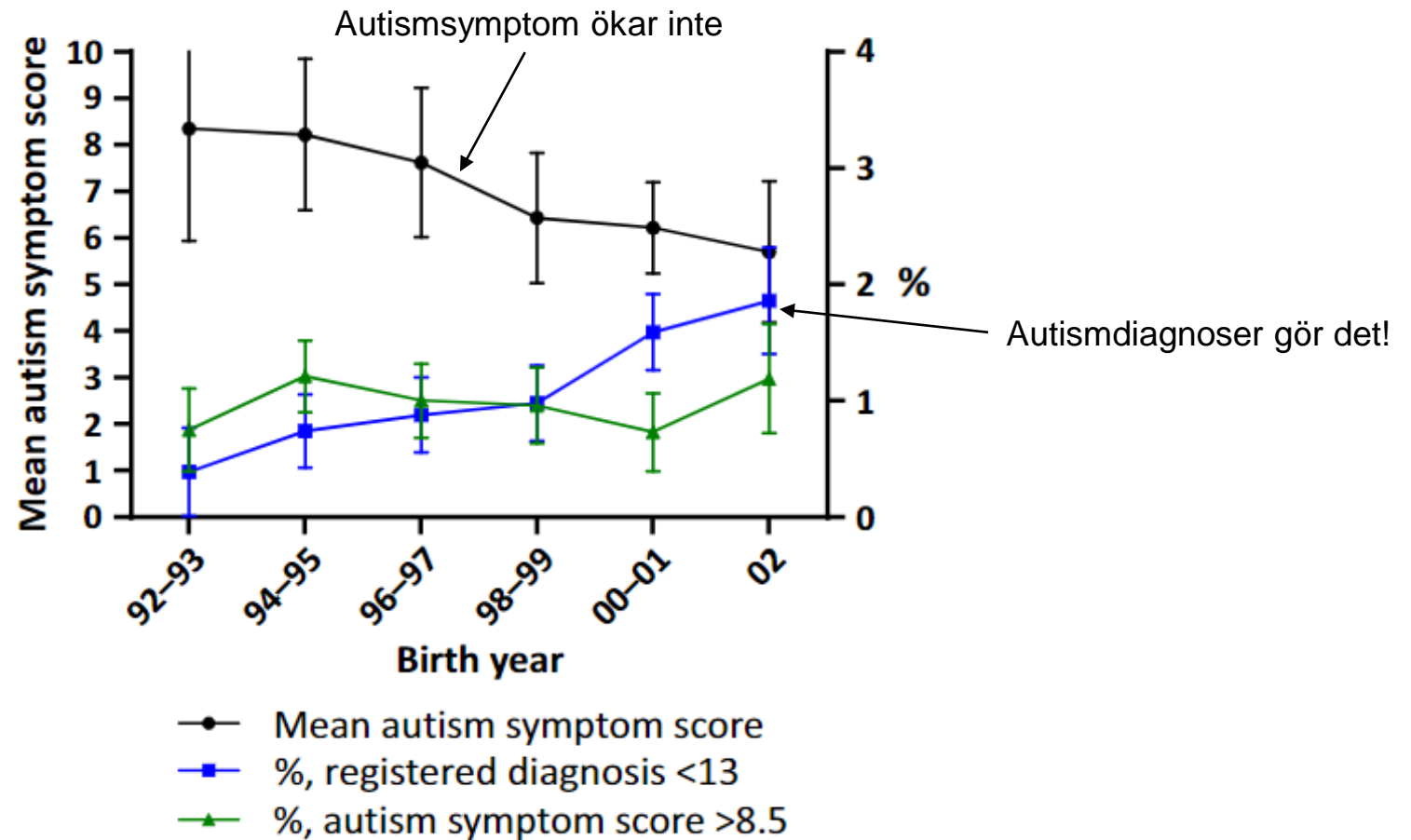


Figure 1 Prevalence of the autism symptom phenotype in the CATSS (green/triangles), prevalence in CATSS of clinical autism diagnosis before the age of 13 (blue/squares), mean autism symptom score in the A-TAC in individuals who received a clinical diagnosis before the age of 13 (black/circles). Means with 95% confidence intervals [Colour figure can be viewed at wileyonlinelibrary.com]

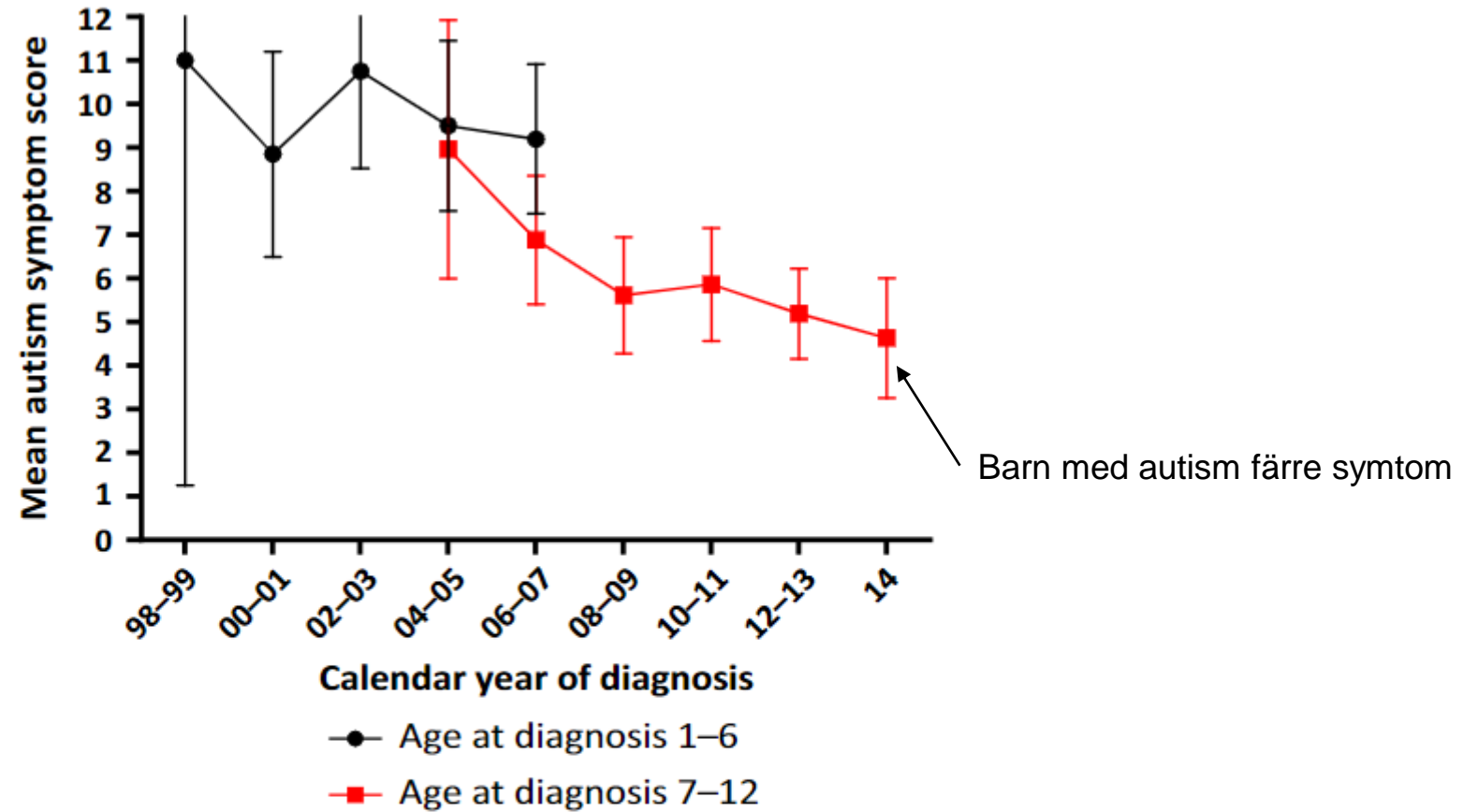




Figure 2 Mean autism symptom score in the A-TAC by calendar year of diagnosis in subgroups that received a diagnosis between age 1-6 or between age 7-12. Means with 95% confidence intervals [Colour figure can be viewed at wileyonlinelibrary.com]

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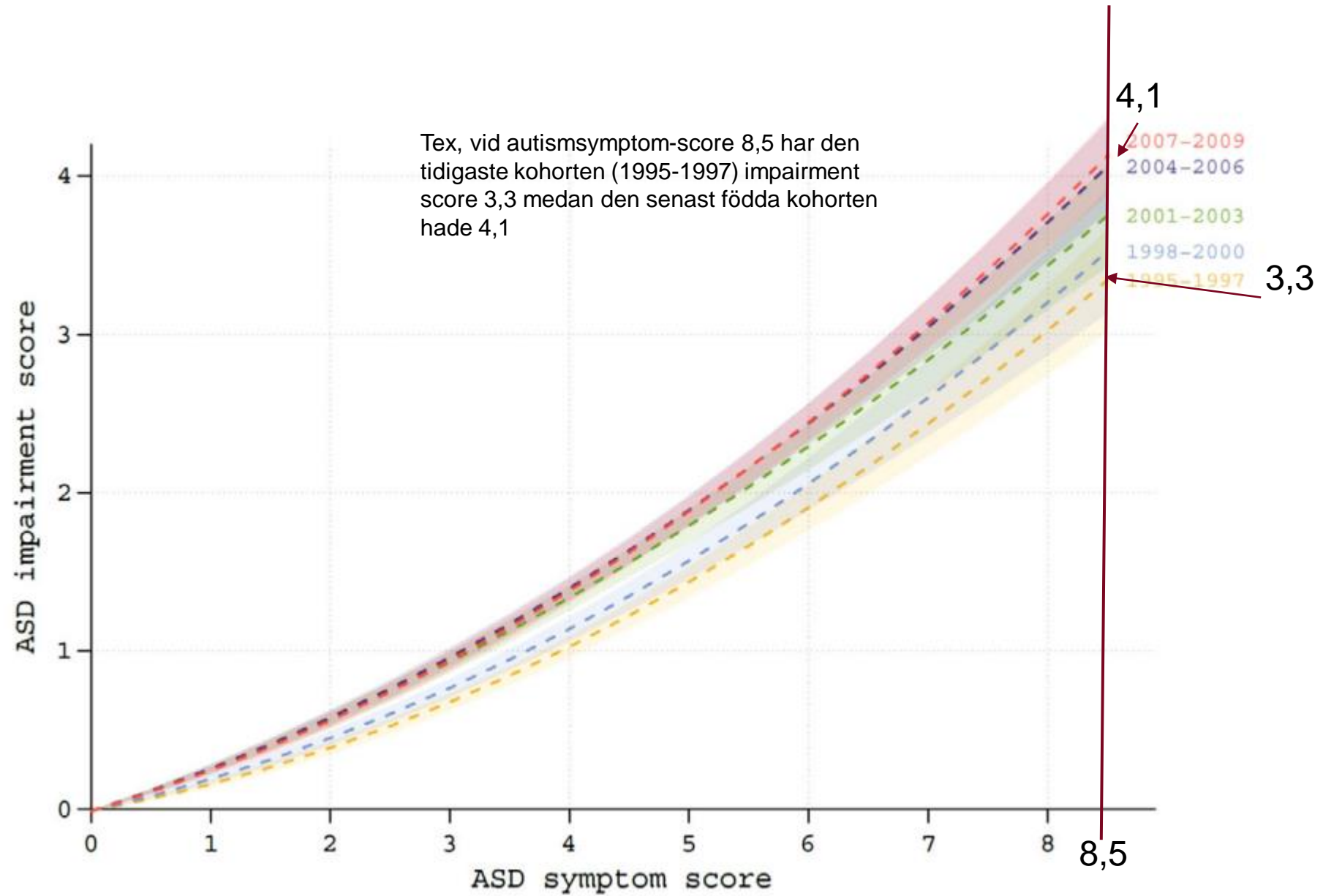
ASD-symptom score

Skattat antal autismsymptom

ASD-impairment score

För varje symptom barnet har - hur mycket funktionsnedsättning ger det?

Ju senare man var född, desto mer funktionsnedsättning per symptom



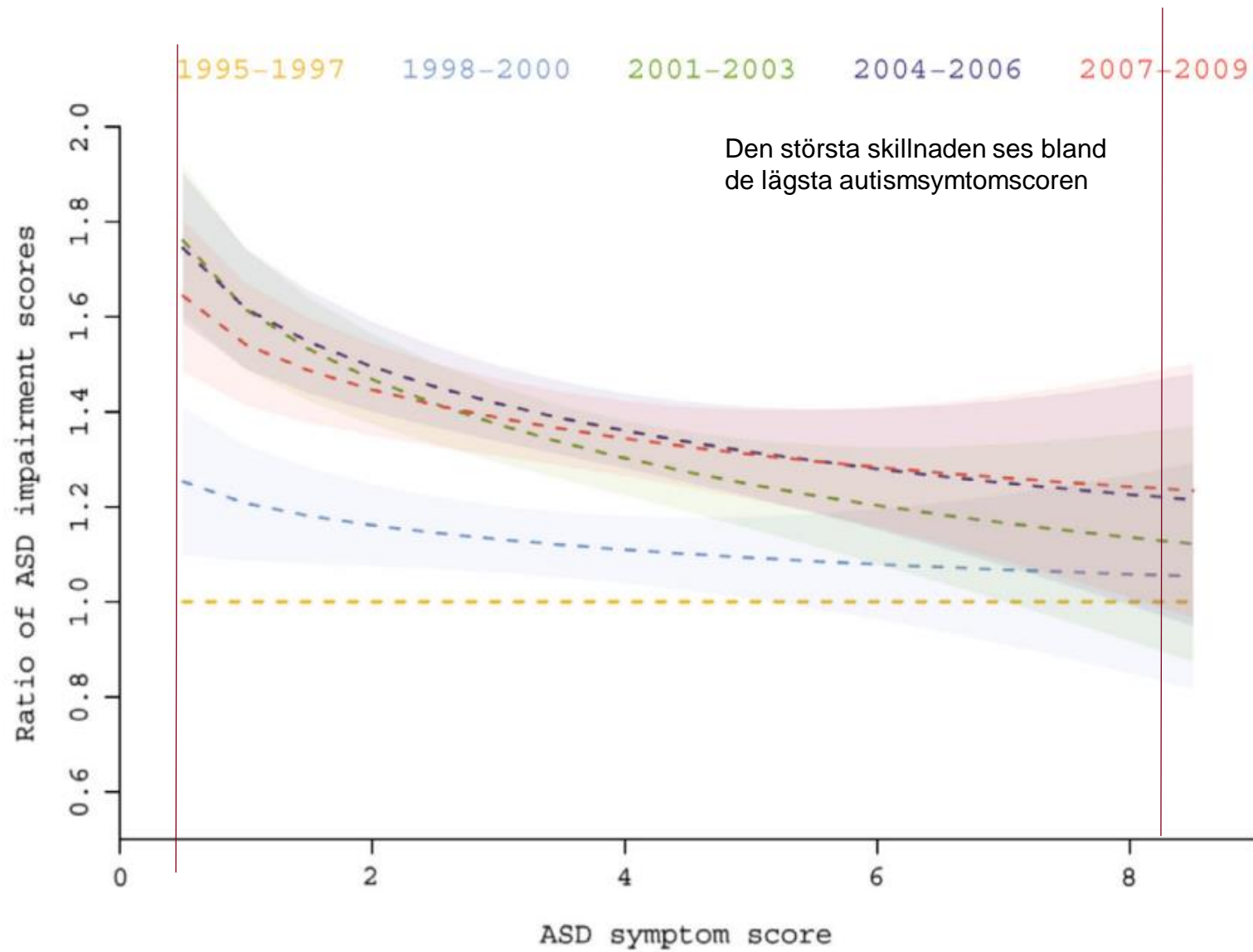


Figure 2 Ratio of ASD impairment score per ASD symptom score, reference cohort being 1995–1997. Ratios and 95% confidence intervals

Sammanfattning autism

- Autismdiagnoser ökar
- Genetiskt lika "subtreshold" och "över treshold"
- Diagnos sätts på färre symptom
- Föräldrar skattar dock funktionsnedsättningen konstant!

ADHD



Diagnostik och läkemedelsbehandling vid adhd

Förekomst, trend och könsskillnader

- Ökar generellt
- Mest bland flickor och unga kvinnor

Original Investigation | Pediatrics

Overdiagnosis of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents A Systematic Scoping Review

Luise Kazda, MPH; Katy Bell, PhD; Rae Thomas, PhD; Kevin McGeechan, PhD; Rebecca Sims, MPsych(Clin); Alexandra Barratt, PhD

The Journal of Child Psychology and Psychiatry



Journal of Child Psychology and Psychiatry 64:8 (2023), pp 1140–1148

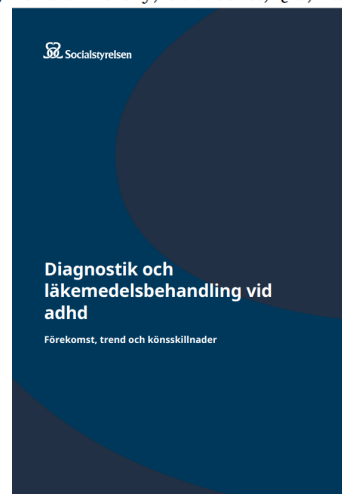
doi:10.1111/jcpp.13700

Increased diagnosis of attention-deficit hyperactivity disorder despite stable hyperactive/inattentive behaviours: evidence from two birth cohorts of Australian children

Luise Kazda,¹ Kevin McGeechan,¹ Katy Bell,¹ Rae Thomas,² and Alexandra Barratt¹

¹Sydney School of Public Health, Faculty of Medicine and Health, The University of Sydney, Sydney, NSW, Australia;

²Institute for Evidence-Based Healthcare, Bond University, Gold Coast, Qld, Australia



Journal of Child Psychology and Psychiatry 59:8 (2018), pp 863–871

doi:10.1111/jcpp.12882

Has the attention deficit hyperactivity disorder phenotype become more common in children between 2004 and 2014? Trends over 10 years from a Swedish general population sample

Mina Rydell,¹ Sebastian Lundström,^{2,3} Christopher Gillberg,² Paul Lichtenstein,¹ and Henrik Larsson^{1,4}

The Journal of Child Psychology and Psychiatry



Journal of Child Psychology and Psychiatry 64:11 (2023), pp 1608–1616

doi:10.1111/jcpp.13854

A twin study of genetic and environmental contributions to attention-deficit/hyperactivity disorder over time

Mark J. Taylor,¹ Joanna Martin,² Agnieszka Butwicki,^{1,3,4} Paul Lichtenstein,¹ Brian D'Onofrio,^{1,5} Sebastian Lundström,⁶ Henrik Larsson,^{1,7} and Mina A. Rosenqvist¹



Association between relative age at school and persistence of ADHD in prospective studies: an individual participant data meta-analysis



Synergy for the Influence of the Month of Birth in ADHD (SIMBA) study group*

Original Investigation | Pediatrics

Overdiagnosis of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents A Systematic Scoping Review

Luise Kazda, MPH; Katy Bell, PhD; Rae Thomas, PhD; Kevin McGeechan, PhD; Rebecca Sims, MPsych(Clin); Alexandra Barratt, PhD

Systematisk review av 334 artiklar

- Lika "subthreshold" och "över threshold"
- Breddning av diagnoskriterier- färre symptom ger diagnos
- ADHD-gruppen, fler har bättre funktion
- Anser överdiagnostik
- Dock fortfarande viss underdiagnostik i vissa grupper

Lägre tolerans för olikheter?

Society's decreasing tolerance for different behavior associated with increased range of behavior diagnosed as abnormal (2)^{57,96}

Medicalization, ambivalence and social control: mothers' descriptions of educators and ADD/ADHD

Claudia Malacrida


University of Lethbridge, Canada

Medicus interruptus in the behaviour of children in disadvantaged contexts in Scotland

Julie Allan (University of Birmingham)

Valerie Harwood (University of Wollongong)

Increased diagnosis of attention-deficit hyperactivity disorder despite stable hyperactive/inattentive behaviours: evidence from two birth cohorts of Australian children

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Två kohorter, lika många ADHD-symptom

- Men kohorten född senare högre risk att få en ADHD-diagnos
- 25% barn med ADHD-diagnos låga ADHD-symptom innan diagnos

Has the attention deficit hyperactivity disorder phenotype become more common in children between 2004 and 2014? Trends over 10 years from a Swedish general population sample





Mina Rydell,¹  Sebastian Lundström,^{2,3} Christopher Gillberg,² Paul Lichtenstein,¹ and Henrik Larsson^{1,4}

CATSS igen

- Ingen skillnad symptom över cutoff
- Kanske liten ökning normalvariant och "subthreshold"
- Något annat än symptom som driver ökning

- 2004-2014

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Lite klurig studie

- Tittar på genetiska och "environmental" faktorer
- Hittar inga tecken på att detta förändrats
- Något annat än genetik/"environment" som driver ökning
- Ungefär "Det är inte fler ADHD-patienter, vi sätter fler ADHD-diagnoser"

Sammanfattning ADHD

- ADHD-symptom kontinuum - lika "subtreshold" och "över treshold"
- Ingen egentlig ökning av ADHD-symptom
- Sätter diagnoser på färre symptom
- Sätts diagnoser på barn som ej scorar över "threshold"

Att tänka på

- Många studier gjorda på samma material
 - Vill egentligen replikera
 - Nya studier men inte jättenytt material
-
- Hänt något nytt senaste tiden? Måste vänta på uppföljning!

Frågor?



Region Jönköpings län

www.rjl.se

