Importancia de la detección e intervención Temprana

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Hospital Sant Joan de Déu Barcelona

23 de febrero de 2023

online

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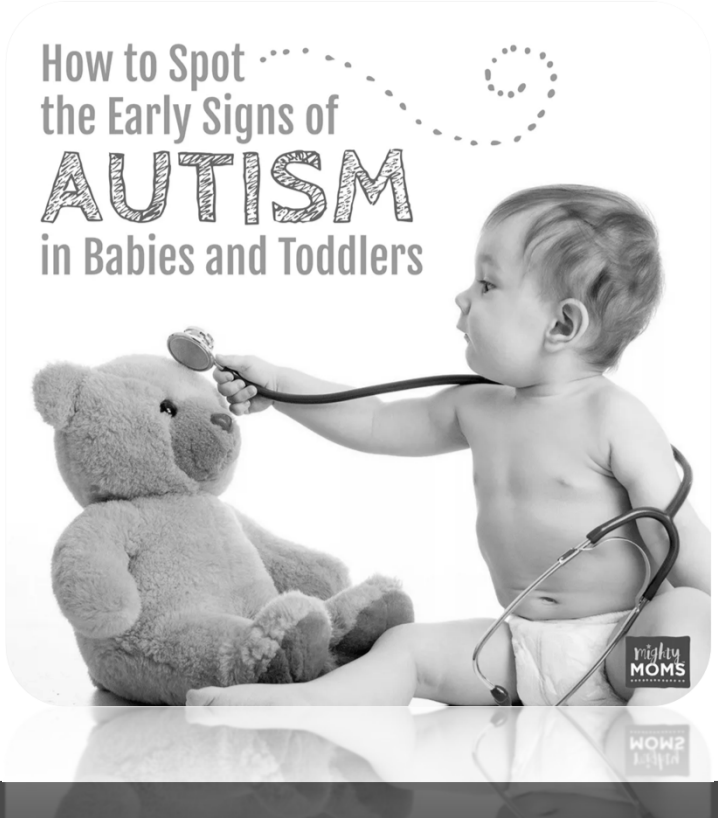
PLAN DE LA CLASE

DETECCIÓN temprana 1



INTERVENCIÓN temprana 2

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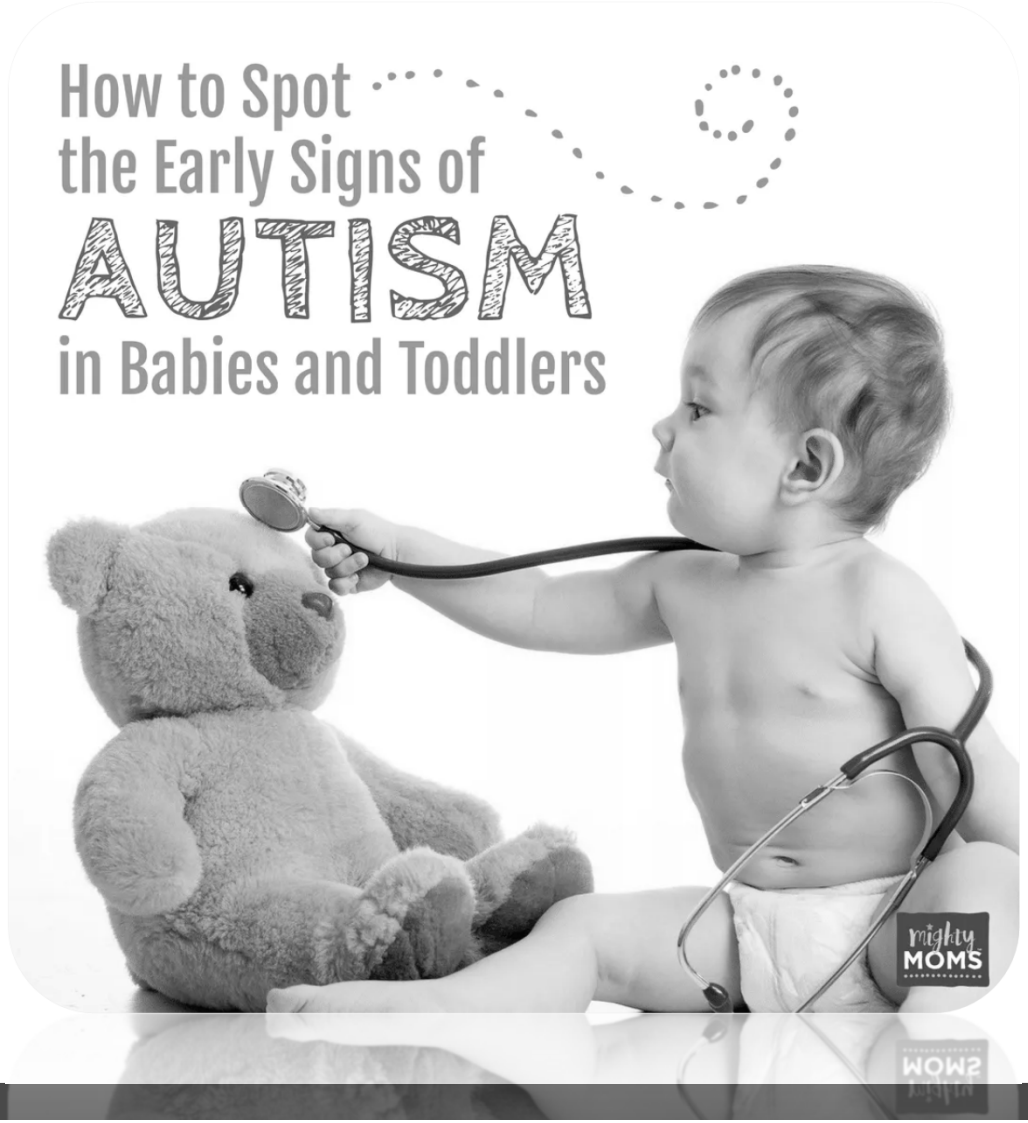
DETECCIÓN temprana 1



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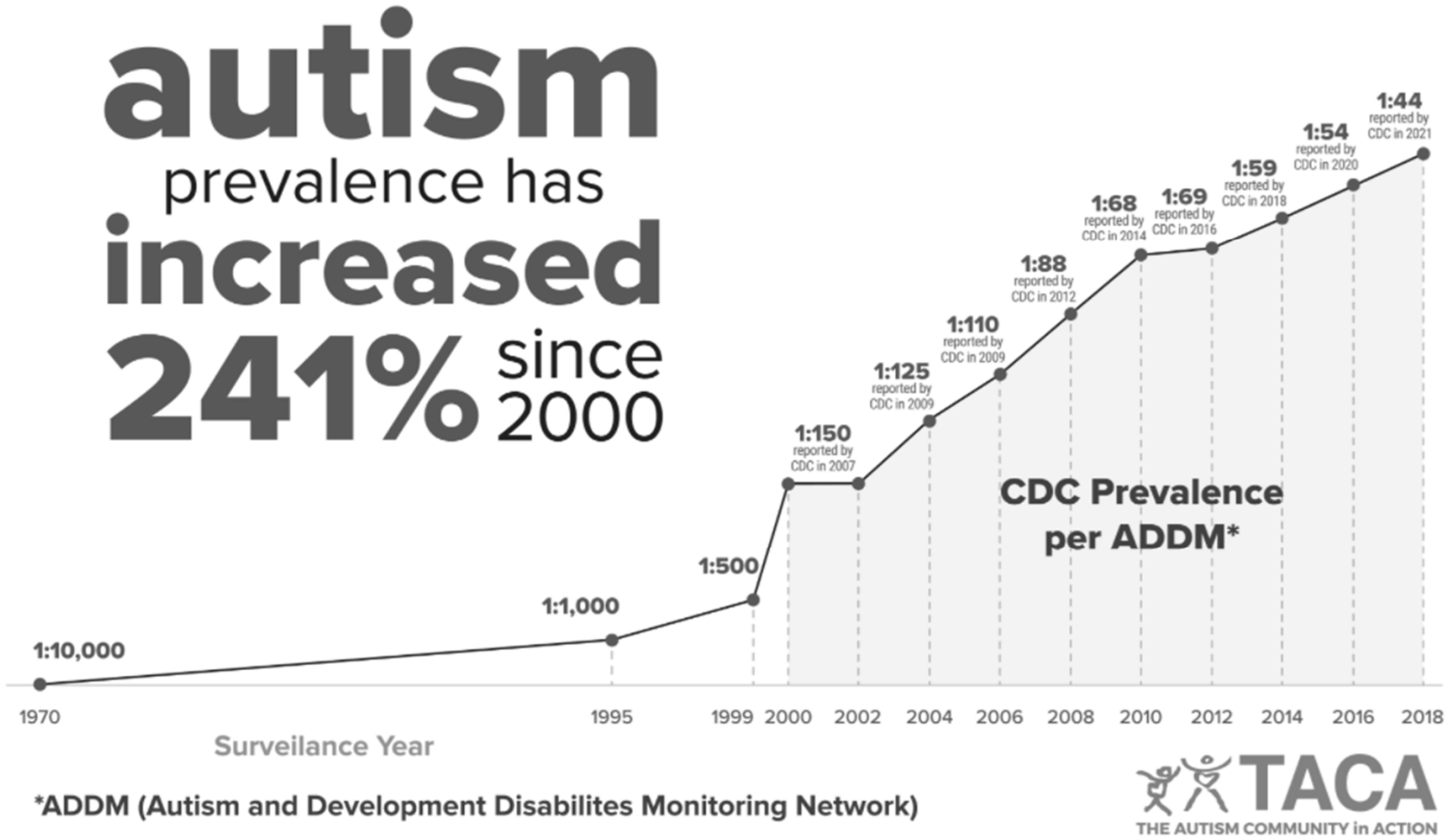
Epidemiología

Prevalencia del TEA – datos 2021



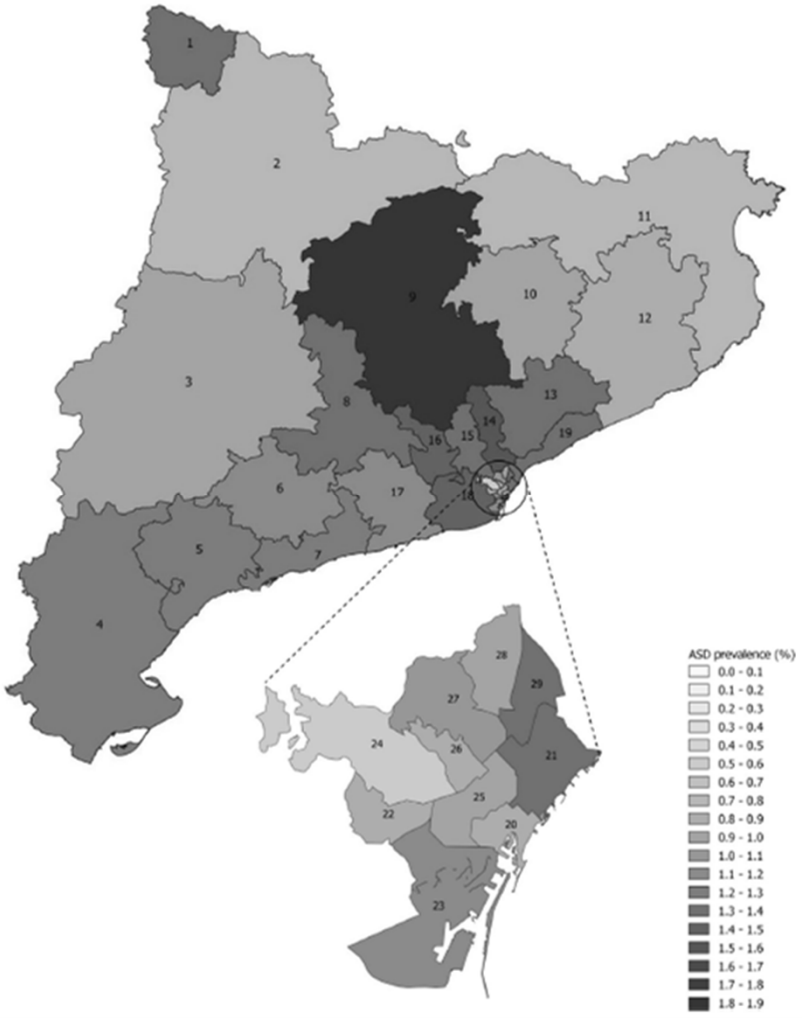
1 de 44
Niños de 8 años identificados con TEA en la red ADDM

2,3%
Porcentaje medio de escolares que cumplen criterios para TEA

CDC (2021)

Prevalencia en Catalunya - 2019

MAPA DE PREVALENCIA EN CATALUNYA
clasificado por áreas sanitarias. Datos 2017

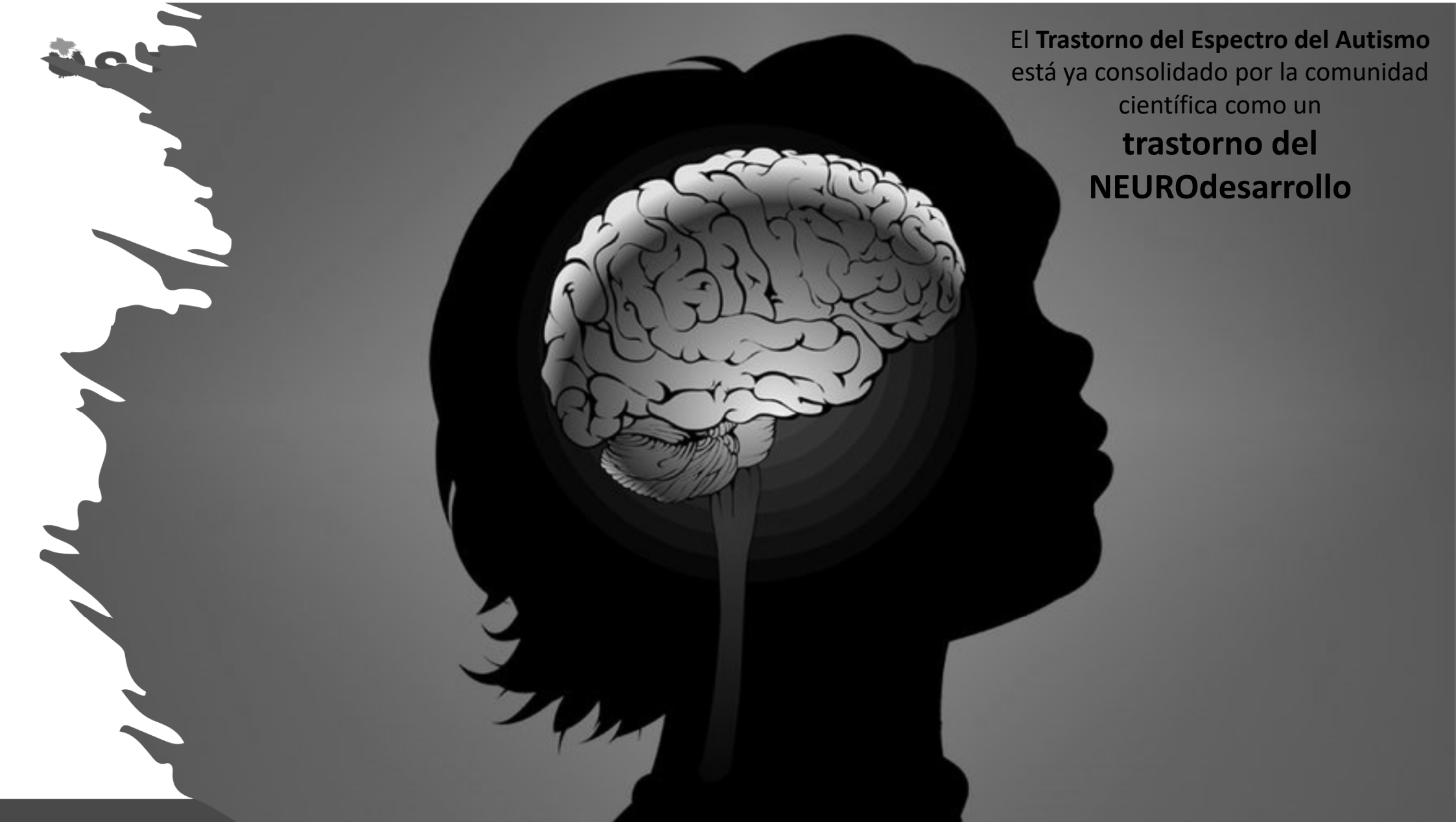


1,23%
Prevalencia media estimada en CAT.

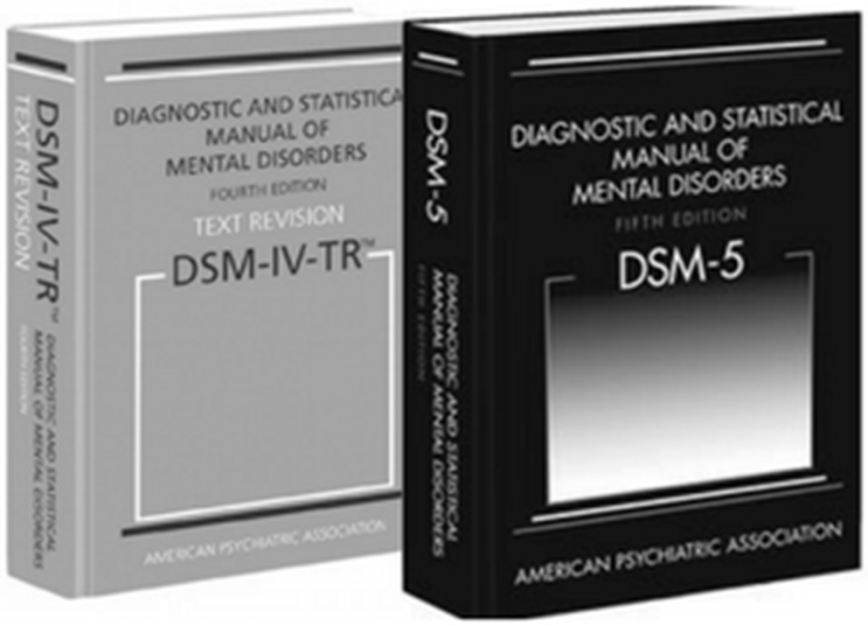
1,95%
Prevalencia media estimada sexo masculino en CAT.

0,46%
Prevalencia media estimada sexo femenino en CAT.

Pérez-Crespo et al., (2019) – *Autism Research*


El **Trastorno del Espectro del Autismo** está ya consolidado por la comunidad científica como un
trastorno del NEURODesarrollo

Criterios diagnósticos



Desde los subtipos de los ***TrastornoS Generalizados del Desarrollo (TGD)*** (*DSM-IV)*, a la conceptualización del espectro del autismo como un *continuum* de afectación: ***Trastorno del Espectro del Autismo (TEA)*** dentro de los trastornos del neurodesarrollo (*DSM-5)*.

Criterios diagnósticos

Trastorno del Espectro del Autismo (TEA)

(A)

ALTERACIÓN DEL DESARROLLO DE LA COMUNICACIÓN e INTERACCIÓN SOCIAL

(B)

DESARROLLO DE PATRONES e INTERESES RESTRICTIVOS Y REPETITIVOS

Criterios diagnósticos

Trastorno del Espectro del Autismo (TEA)

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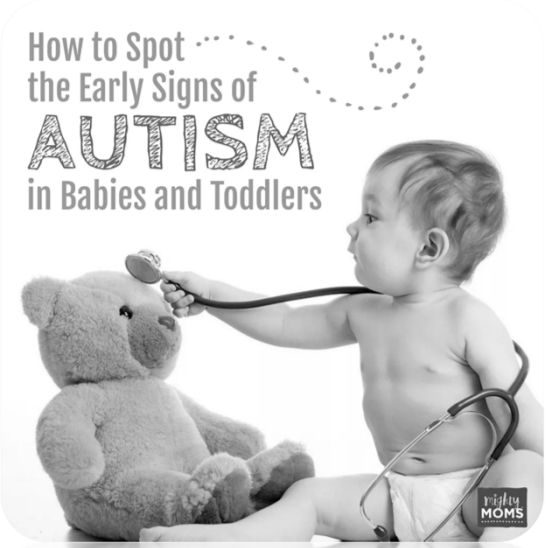
LOS SIGNOS DE DETECCIÓN EN EDAD TEMPRANA



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¿Cuál es el MOTIVO DE CONSULTA más común en edades tempranas?

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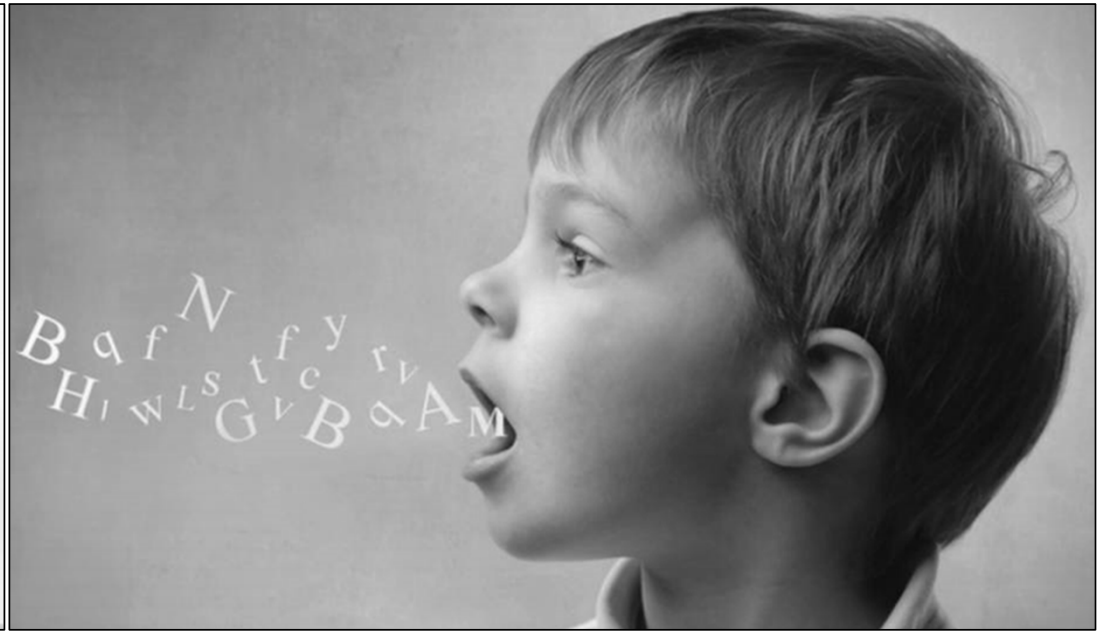
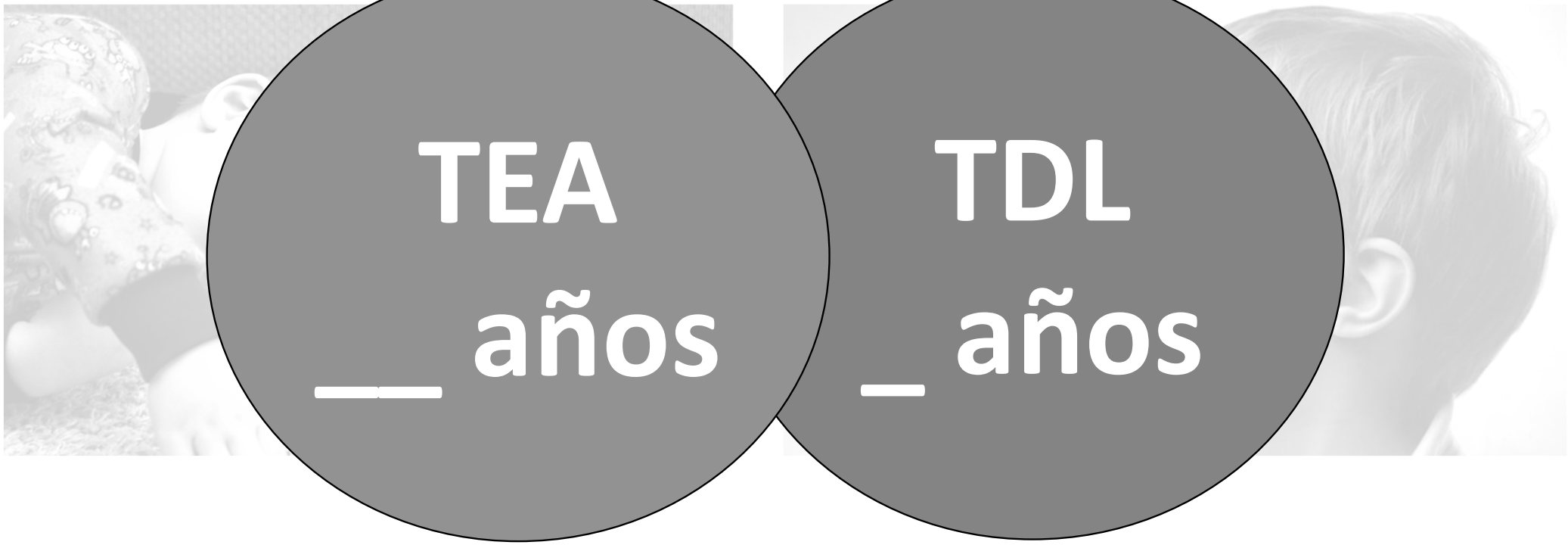
"Mi hijo/a NO ha empezado a hablar y está a punto de cumplir los ___ años"



EDAD DE DIAGNÓSTICO



Zwaigenbaum et al., (2015) – *Pediatrics*

Rescorla et al., (2000) – *J Child Lang*

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PRIMERAS FASES DE DESARROLLO

40-50% DE LOS CASOS CON TEA INICIAN CON UN RETRASO DEL LENGUAJE CLÍNICAMENTE SIGNIFICATIVO

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¿Cómo diferenciamos un retraso del lenguaje, de un caso de TEA entre los 12 y 30 meses?

≠

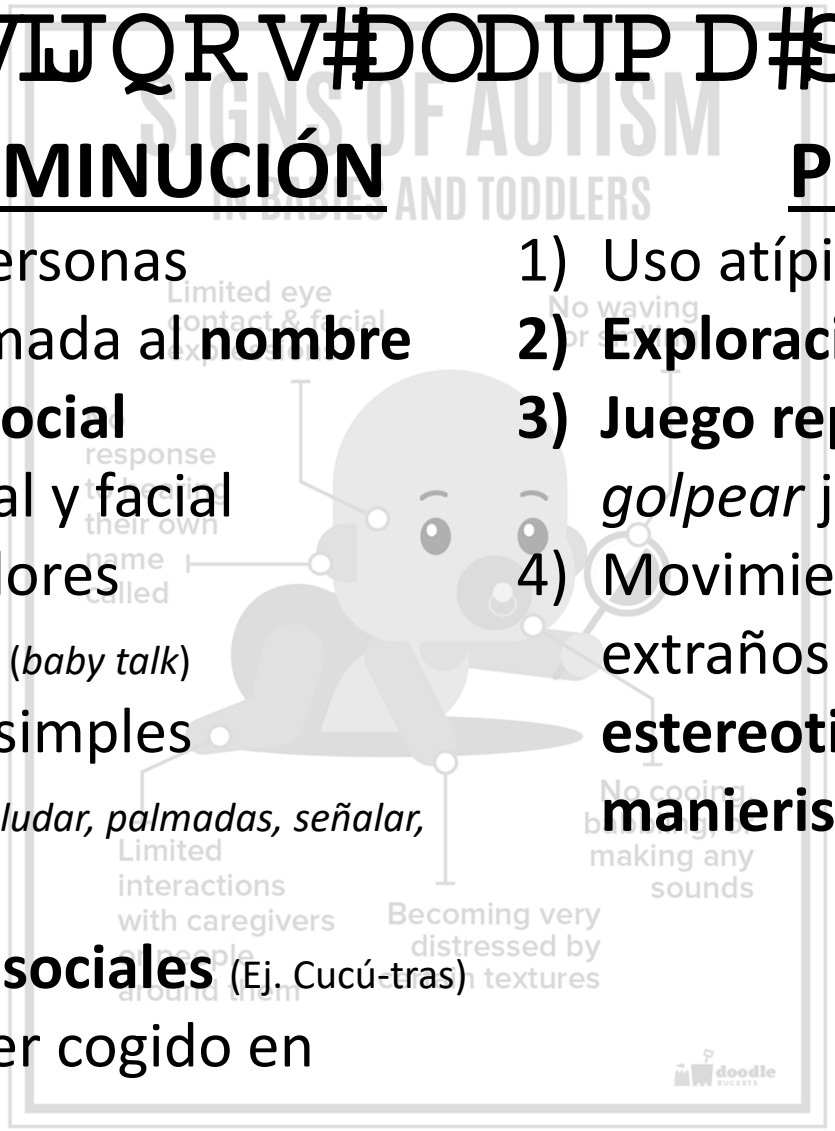
VIJQRV#DOODUP D#SDUD#XQ#WHD

AUSENCIA/DISMINUCIÓN

1) **Mirada** dirigida a personas
2) Orientación a la llamada al **nombre**
3) Respuesta **sonrisa social**
4) **Expresión** emocional y facial
5) **Demandas** a cuidadores
6) **Balbuceo** recíproco (*baby talk*)
7) **Imitación** acciones simples
8) **Gestos** sociales *(Ej. saludar, palmadas, señalar, pedir etc.)*
9) Respuesta a **juegos sociales** (Ej. Cucú-tras)
10) **Anticipación** ej.al ser cogido en brazos

PRESENCIA

1) Uso atípico **juego manipulativo**
2) **Exploración visual** inusual
3) **Juego repetitivo** de *girar*, *rotar*, *golpear* juguetes
4) Movimientos corporales extraños en formas de **estereotipias motoras, manierismos** *(Ej. aleteos etc.)*



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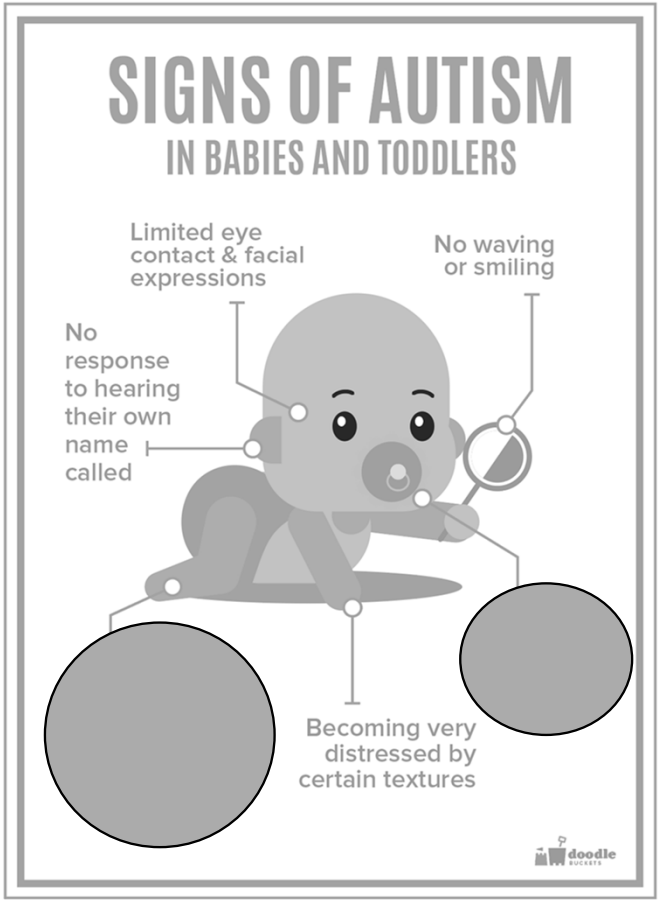
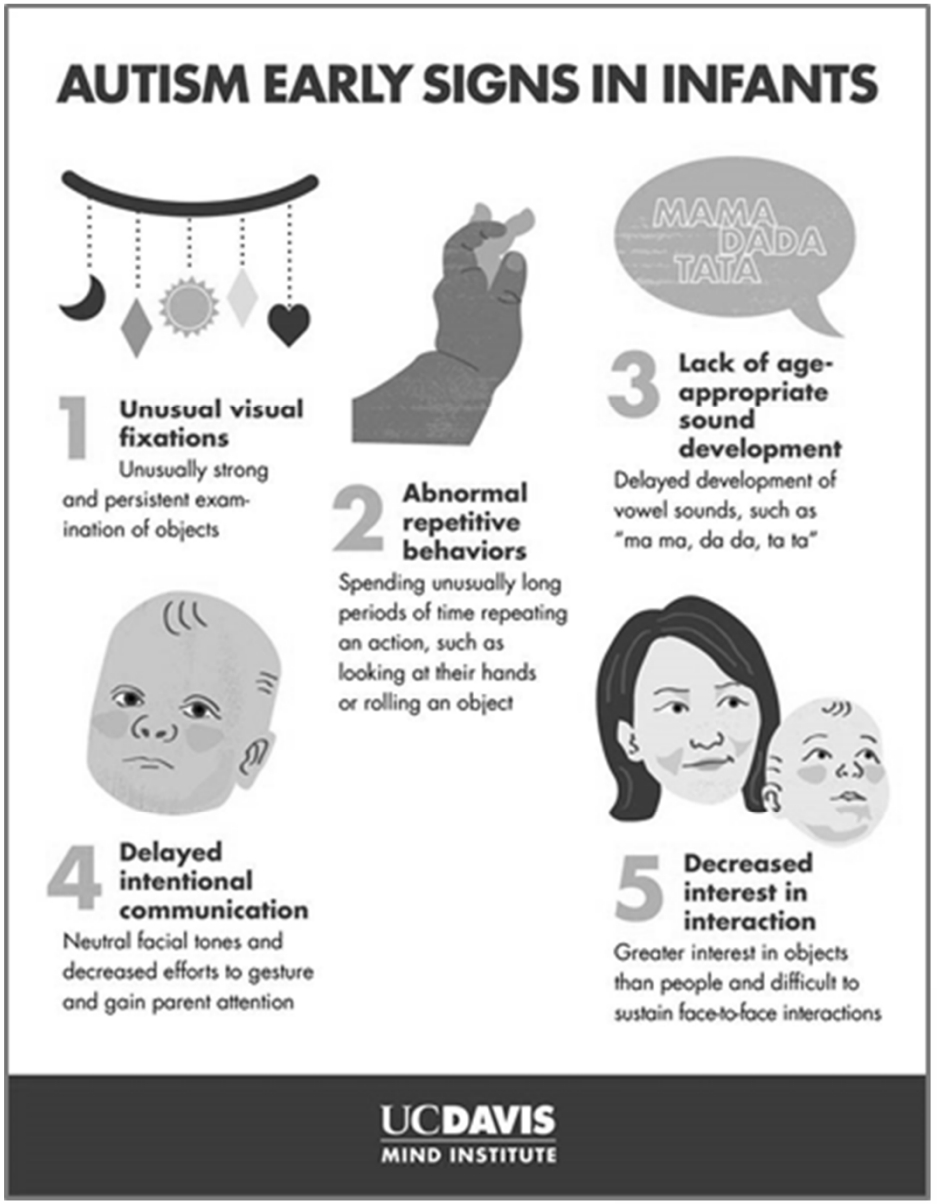
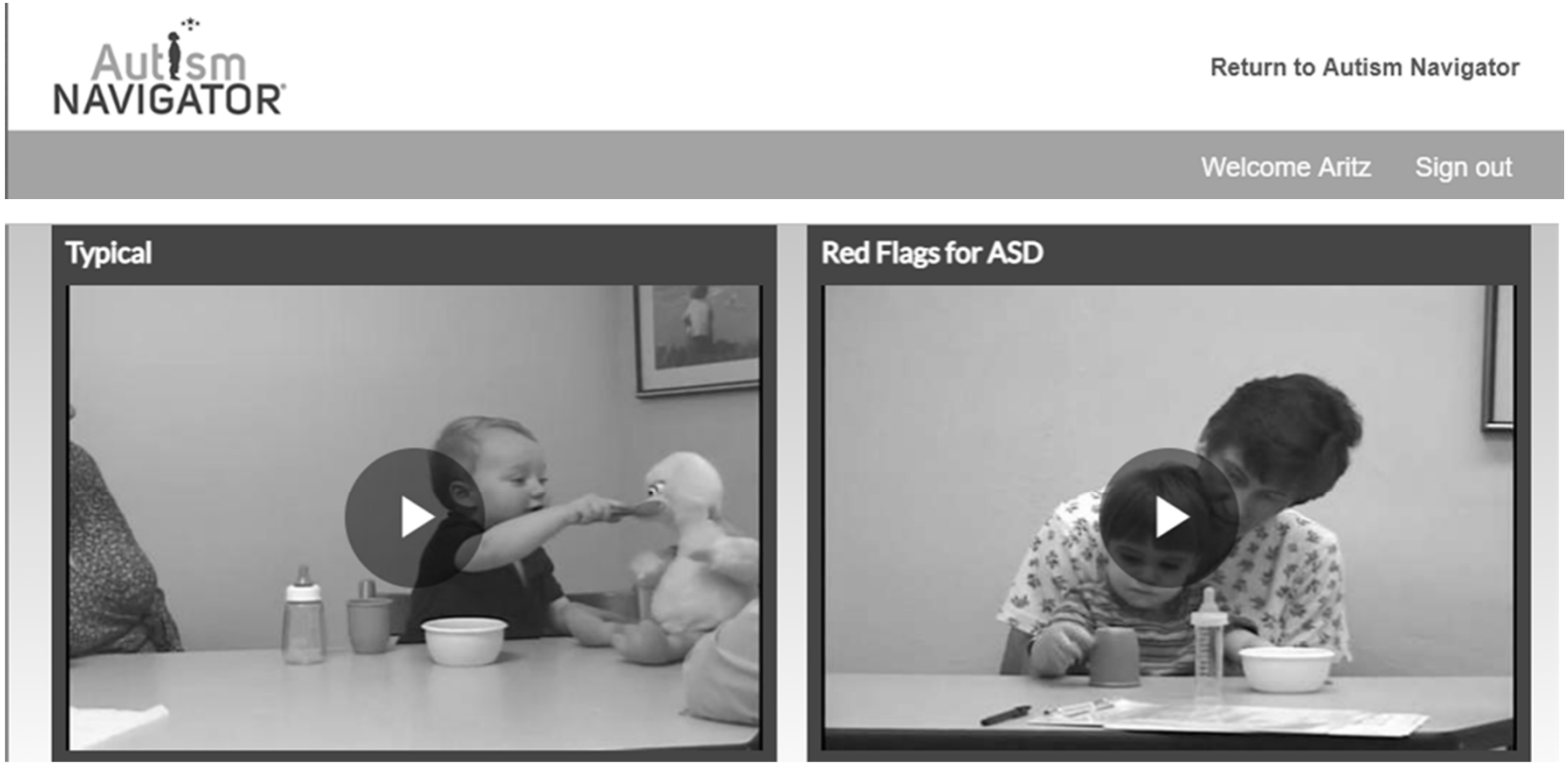




Más recursos para entrenar la observación clínica



https://resources.autismnavigator.com/asdglossary/#/section/22/repetitiveObjects

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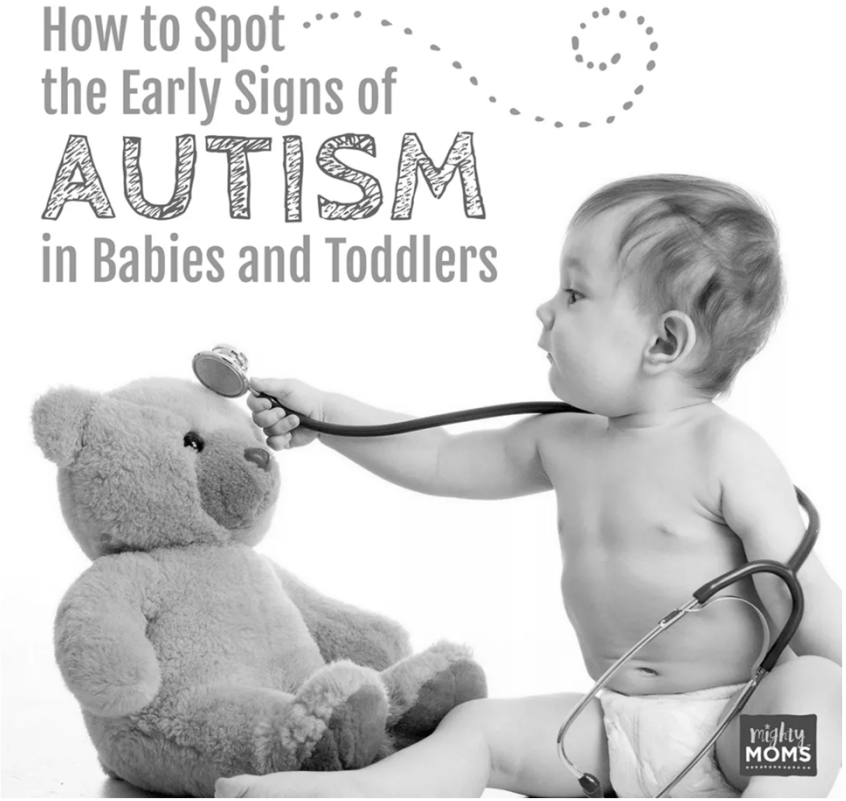
PROTOCOLO DE EVALUACIÓN TEMPRANA

¿Por dónde empezamos?



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3 NIVELES DE DETECCIÓN

De la detección al diagnóstico

NIVELES DE DETECCIÓN TEMPRANA

Vigilancia del desarrollo

- **NIVEL 1: Atención Primaria Pediátrica**

Cribado especializado TEA

- **NIVEL 2: Atención primaria y secundaria**

Diagnóstico especializado

- **NIVEL 3: Especialistas TEA**

NIVELES DE DETECCIÓN TEMPRANA

Vigilancia del desarrollo

Pruebas y cuestionarios de vigilancia del desarrollo neurotípico: CDC APP, ASQ-3, BAYLEY-ST

Cribado especializado TEA

Screening específico TEA: M-CHAT-R/F, ESAT etc.

Diagnóstico especializado

Diagnóstico: ADOS-2, ADI-R, DSM-5

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NIVEL 1
VIGILANCIA DEL DESARROLLO

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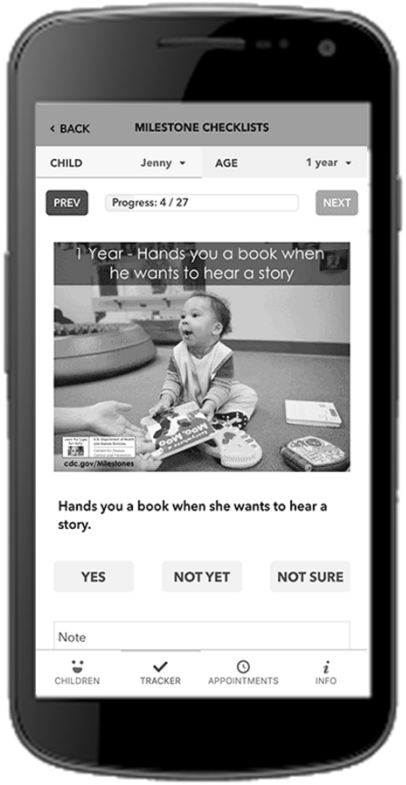
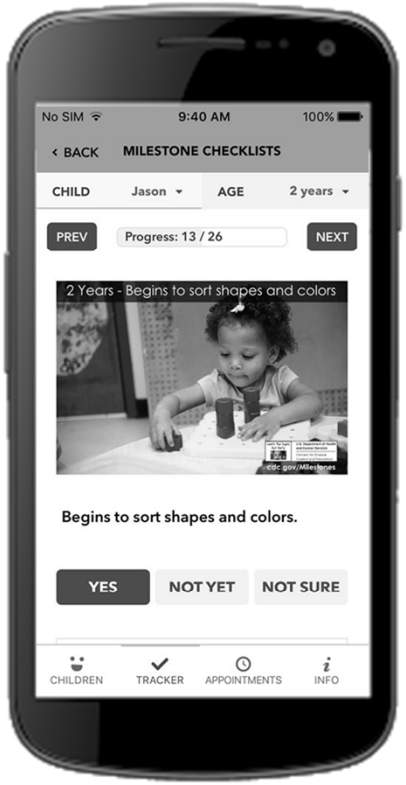
Ejemplo APP





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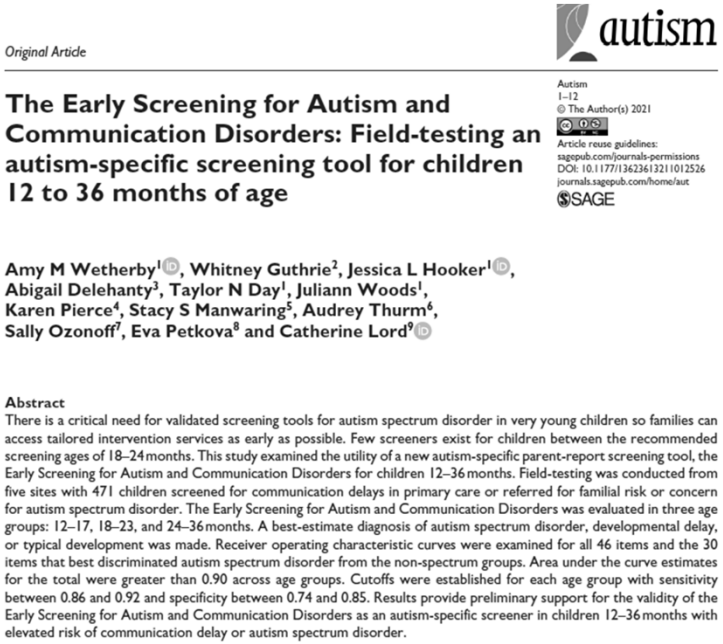
NIVEL 2
CRIBADO ESPECIALIZADO (TEA)


Original Article

autism

The Early Screening for Autism and Communication Disorders: Field-testing an autism-specific screening tool for children 12 to 36 months of age

Autism
1–12
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SAGE

Amy M Wetherby[1], Whitney Guthrie[2], Jessica L Hooker[1], Abigail Delehanty[3], Taylor N Day[1], Juliann Woods[1], Karen Pierce[4], Stacy S Manwaring[5], Audrey Thurm[6], Sally Ozonoff[7], Eva Petkova[8] and Catherine Lord[9]

Abstract

There is a critical need for validated screening tools for autism spectrum disorder in very young children so families can access tailored intervention services as early as possible. Few screeners exist for children between the recommended screening ages of 18–24 months. This study examined the utility of a new autism-specific parent-report screening tool, the Early Screening for Autism and Communication Disorders for children 12–36 months. Field-testing was conducted from five sites with 471 children screened for communication delays in primary care or referred for familial risk or concern for autism spectrum disorder. The Early Screening for Autism and Communication Disorders was evaluated in three age groups: 12–17, 18–23, and 24–36 months. A best-estimate diagnosis of autism spectrum disorder, developmental delay, or typical development was made. Receiver operating characteristic curves were examined for all 46 items and the 30 items that best discriminated autism spectrum disorder from the non-spectrum groups. Area under the curve estimates for the total were greater than 0.90 across age groups. Cutoffs were established for each age group with sensitivity between 0.86 and 0.92 and specificity between 0.74 and 0.85. Results provide preliminary support for the validity of the Early Screening for Autism and Communication Disorders as an autism-specific screener in children 12–36 months with elevated risk of communication delay or autism spectrum disorder.

Nuevos instrumentos de cribado para una detección más temprana

NIVEL 2
CRIBADO ESPECIALIZADO (TEA)

M-CHAT
REVISED WITH FOLLOW-UP

https://mchatscreen.com/wp-content/uploads/2015/05/M-CHAT_Spanish_WH_V2_RP.pdf

https://mchatscreen.com/wp-content/uploads/2015/05/M-CHAT-R_F_Spanish_Spain.pdf

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M-CHAT-R/F – ¡ejercicio!

M-CHAT

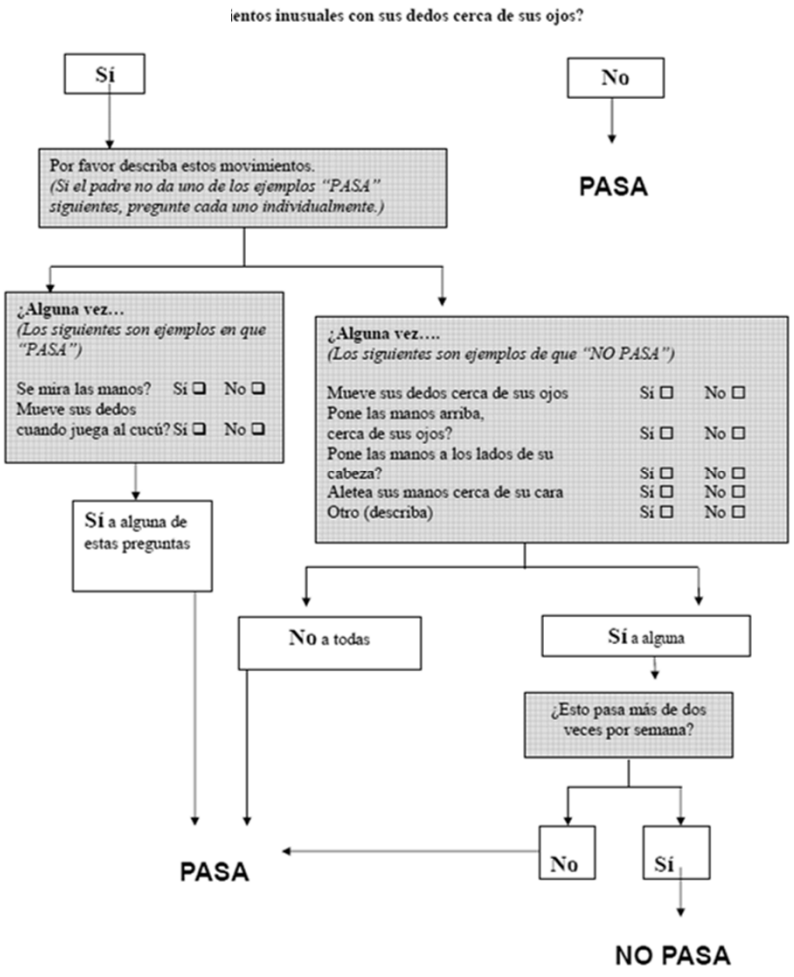
REVISED WITH FOLLOW-UP

La respuesta "**NO**" indica riesgo de TEA para todos los ítems exceptuando 3…

¿Cuáles?

1. Si usted señala algo al otro lado de la habitación, ¿su hijo/a lo mira? (POR EJEMPLO, Si usted señala a un juguete, un peluche o un animal, ¿su hijo/a lo mira?)	SÍ	NO
2. ¿Alguna vez se ha preguntado si su hijo/a es sordo/a?	SÍ	NO
3. ¿Su hijo/a juega juegos de fantasía o imaginación? (POR EJEMPLO, "hace como que" bebe de una taza vacía, habla por teléfono o da de comer a una muñeca o peluche,…)	SÍ	NO
4. ¿A su hijo le gusta subirse a cosas? (POR EJEMPLO, a una silla, escaleras, o tobogán,…)	SÍ	NO
5. ¿Hace su hijo/a movimientos inusuales con sus dedos cerca de sus ojos? (POR EJEMPLO, mueve sus dedos cerca de sus ojos de manera inusual?)	SÍ	NO
6. ¿Su hijo/a señala con un dedo cuando quiere pedir algo o pedir ayuda? (POR EJEMPLO, señala un juguete o algo de comer que está fuera de su alcance?)	SÍ	NO
7. Su hijo/a señala con un dedo cuando quiere mostrarle algo que le llama la atención? (POR EJEMPLO, señala un avión en el cielo o un camión muy grande en la calle)	SÍ	NO
8. ¿Su hijo/a se interesa en otros niños? (POR EJEMPLO, mira con atención a otros niños, les sonríe o se les acerca?)	SÍ	NO
9. ¿Su hijo/a le muestra cosas acercándolas o levantándolas para que usted las vea – no para pedir ayuda sino solamente para compartirlas con usted? (POR EJEMPLO, le muestra una flor o un peluche o un coche de juguete)	SÍ	NO
10. ¿Su hijo/a responde cuando usted le llama por su nombre? (POR EJEMPLO, se vuelve, habla o balbucea, o deja de hacer lo que estaba haciendo para mirarle?)	SÍ	NO
11. ¿Cuándo usted sonríe a su hijo/a, él o ella también le sonríe?	SÍ	NO
12. ¿Le molestan a su hijo/a ruidos cotidianos? (POR EJEMPLO, la aspiradora o la música, incluso cuando está no está excesivamente alta?)	SÍ	NO
13. ¿Su hijo/a camina solo?	SÍ	NO
14. ¿Su hijo/a le mira a los ojos cuando usted le habla, juega con él o ella, o lo viste?	SÍ	NO
15. ¿Su hijo/a imita sus movimientos? (POR EJEMPLO, decir adiós con la mano, aplaudir o algún ruido gracioso que usted haga?)	SÍ	NO
16. Si usted se gira a ver algo, ¿su hijo/a trata de mirar hacia lo que usted está mirando?	SÍ	NO
17. ¿Su hijo/a intenta que usted le mire/preste atención? (POR EJEMPLO, busca que usted le haga un cumplido, o le dice "mira" ó "mírame")	SÍ	NO
18. ¿Su hijo/a le entiende cuando usted le dice que haga algo? (POR EJEMPLO, si usted no hace gestos, ¿su hijo/a entiende "pon el libro encima de la silla" o "tráeme la manta"?)	SÍ	NO
19. Si algo nuevo pasa, ¿su hijo/a le mira para ver como usted reacciona al respecto? (POR EJEMPLO, si oye un ruido extraño o ve un juguete nuevo, ¿se gira a ver su cara?)	SÍ	NO
20. Le gustan a su hijo/a los juegos de movimiento? (POR EJEMPLO, le gusta que le balancee, o que le haga "el caballito" sentándole en sus rodillas)	SÍ	NO

M-CHAT Revised / FOLLOW UP



*Sólo casos positivos y de los ítems positivos para confirmar!

*Puntuaciones a partir de 3 y máximo de 7. A partir de puntuación 8 o superior se deriva directamente a NIVEL 3

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NIVEL 3
EVALUACIÓN ESPECIALIZADA (TEA)

ADOS-2

ADOS-2

Autism Diagnostic Observational Schedule

Lord C., et al., 2000.

La finalidad del instrumento es valorar la sintomatología TEA (que no esté afectada por el nivel de lenguaje).

- **Módulo T: sin lenguaje o palabras sueltas (de 12 a 30 meses)**
- **Módulo 1: sin lenguaje o palabras sueltas (31 meses o más)**
- **Módulo 2: lenguaje basado en frases de dos-tres palabras (no complejo)**
- **Módulo 3: lenguaje fluido y gramaticalmente complejo (entre 4 y 16 años)**
- **Módulo 4: adultos con lenguaje fluido (+17 años)**

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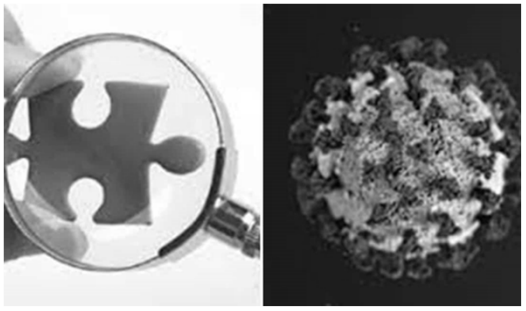

…ADOS-2 y otras evaluaciones en situación de COVID19 en ámbito sanitario

https://autismallianceofmichigan.org/asd-evaluation-during-covid-19-when-the-ados-2-cannot-be-scored/

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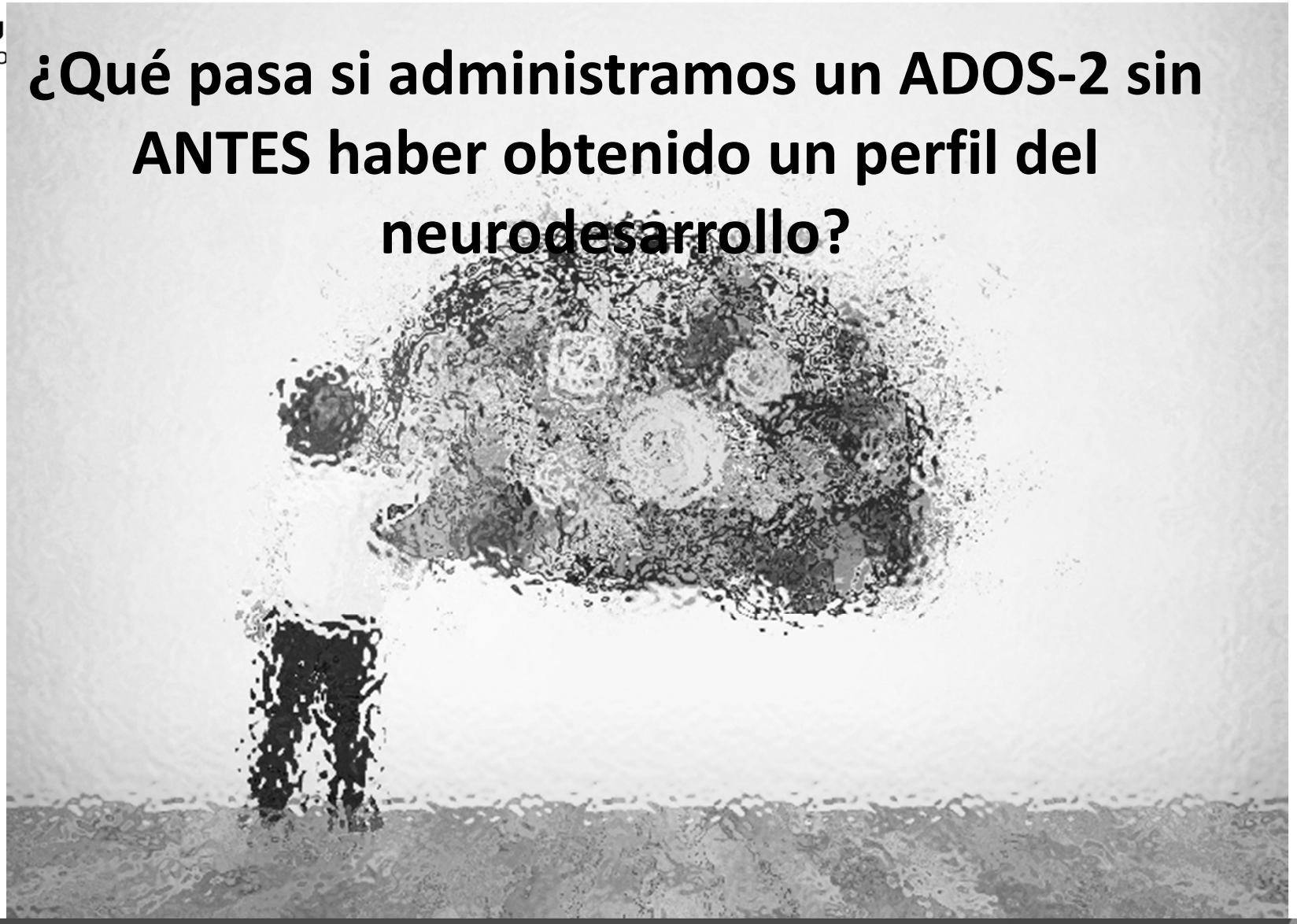
¿Qué pasa si administramos un ADOS-2 sin ANTES haber obtenido un perfil del neurodesarrollo?



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EVALU IÓN P CIALIZ A (TEA)

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NIVEL 3
PERFIL DE NEURODESARROLLO (TEA)

BAYLEY-III - neruodesarrollo

Bayley
Escalas Bayley de desarrollo infantil-III

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NUNCA REALIZAR UN ADOS-2 sin ANTES REALIZAR UNA EVALUACIÓN DEL NEURODESARRO

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PREGUNTAS primera parte

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INTERVENCIÓN temprana 2

EQUIPO CERTIFICADO – ESDM

en **UnimTEA**: Unidad multidisciplinar del Trastorno del Espectro del Autismo

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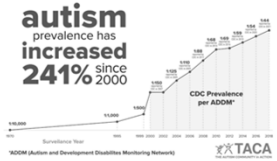
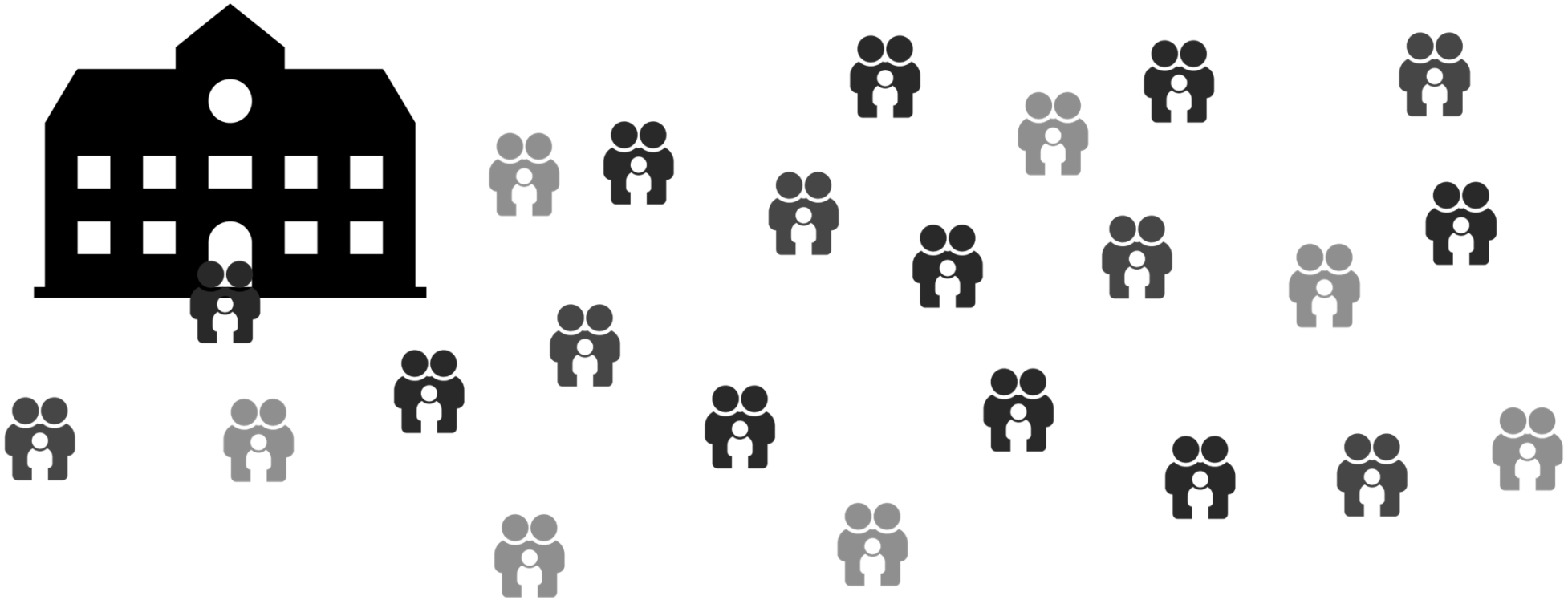
Cada vez más niños pequeños con riesgo de TEA acuden a los servicios de Atención Temprana





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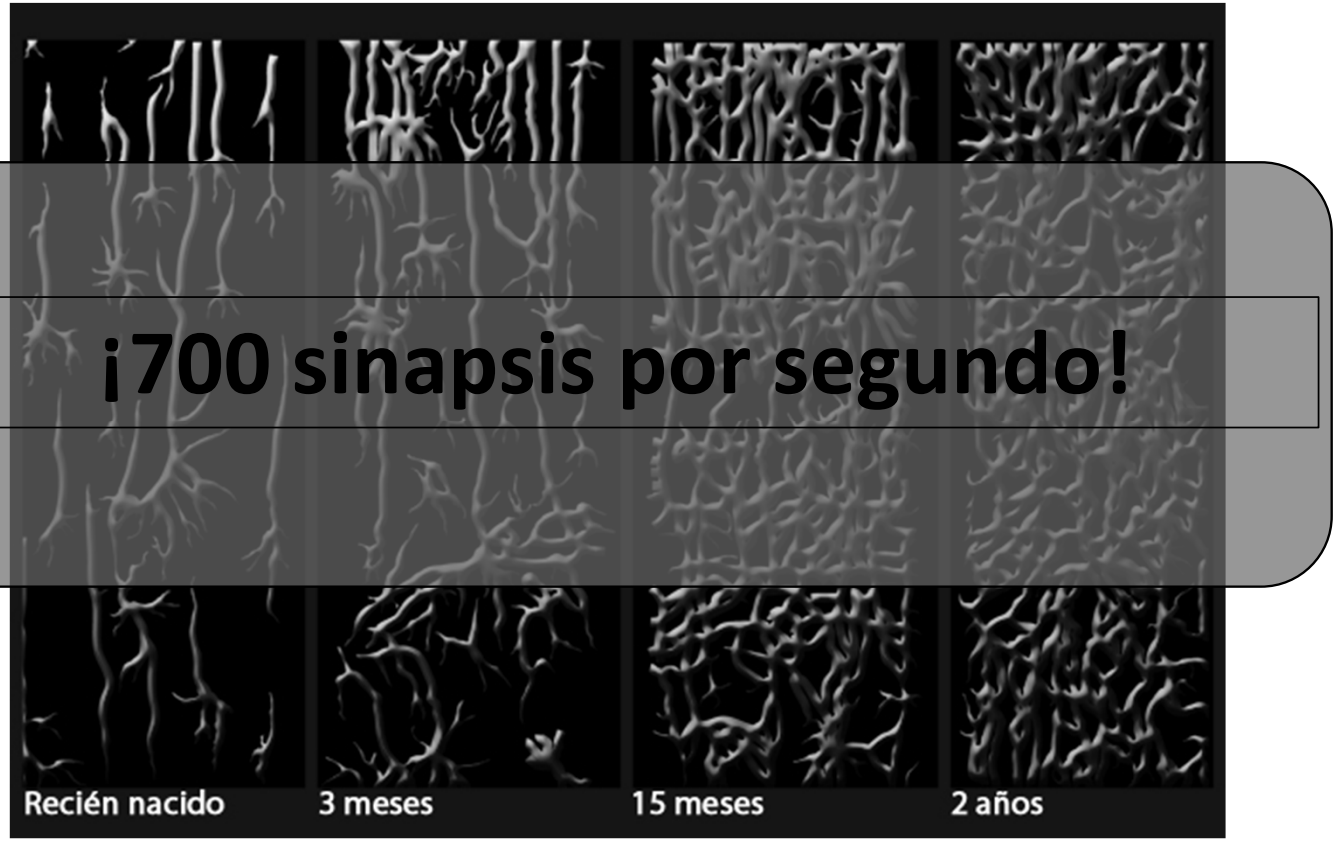
¿Por qué temprano?

AUMENTO DE LA DENSIDAD SINÁPTICA, SEGUIDO POR LA PODA NEURONAL



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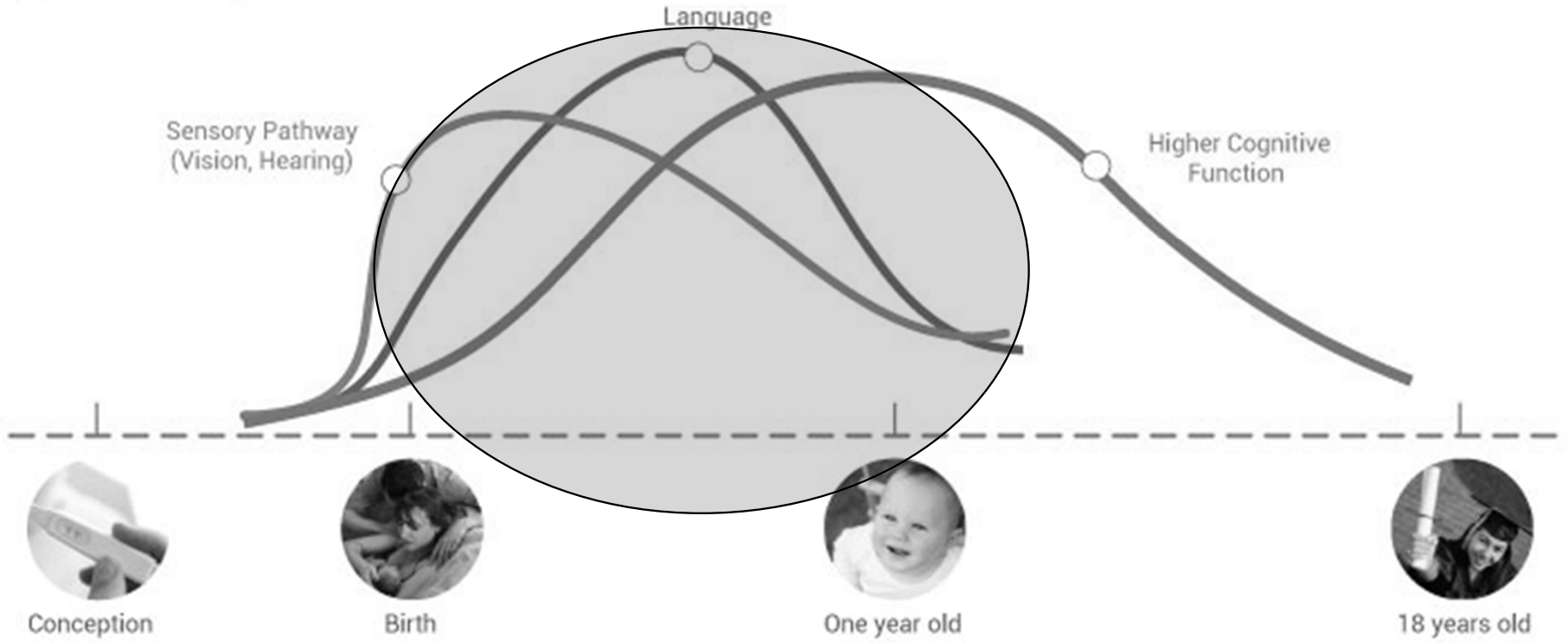
Indiana Early Learning Advisory Committee

HUMAN BRAIN DEVELOPMENT

Greatest at very young ages



SOURCE: C.A. NELSON IN FROM NEURONS TO NEIGHBORHOODS, 2000

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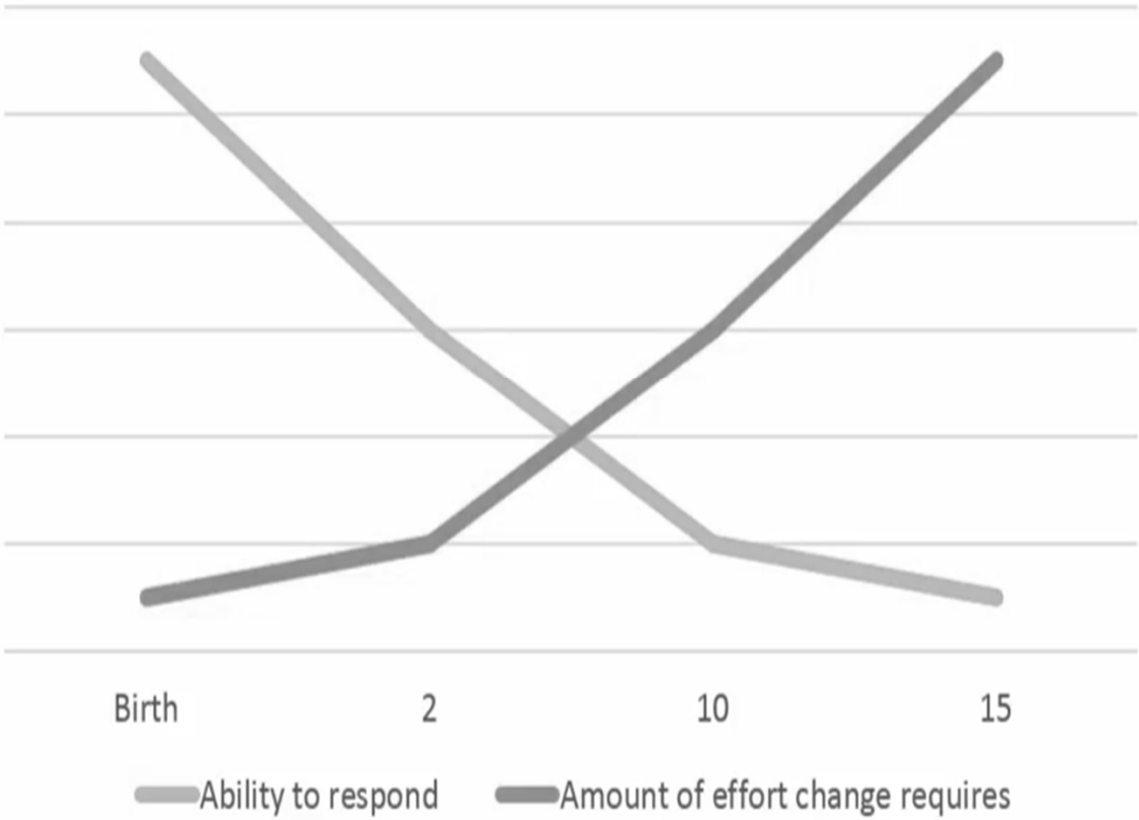
PLASTICIDAD CEREBRAL



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ANÁLISIS DE ABSTRACT: ¿Temprano mejor?

ORIGINAL PAPER

Outcome for Children Receiving the Early Start Denver Model Before and After 48 Months

Giacomo Vivanti[1,2] · Cheryl Dissanayake[2] · The Victorian ASELCC Team[3]

Published online: 28 March 2016

Abstract The Early Start Denver Model (ESDM) is an intervention program recommended for pre-schoolers with autism ages 12–48 months. The rationale for this recommendation is the potential for intervention to affect developmental trajectories during early sensitive periods. We investigated outcomes of 32 children aged 18–48 months and 28 children aged 48–62 months receiving the ESDM for one year (approximately 20 h per week). Younger children achieved superior verbal DQ gains compared to their older counterparts. There were no group differences with respect to non-verbal DQ and adaptive behavior (with both age-groups undergoing significant change), or ASD severity (with neither age-group showing improvements on the ADOS). The association between verbal DQ gains and age at intake was moderated by baseline verbal level.

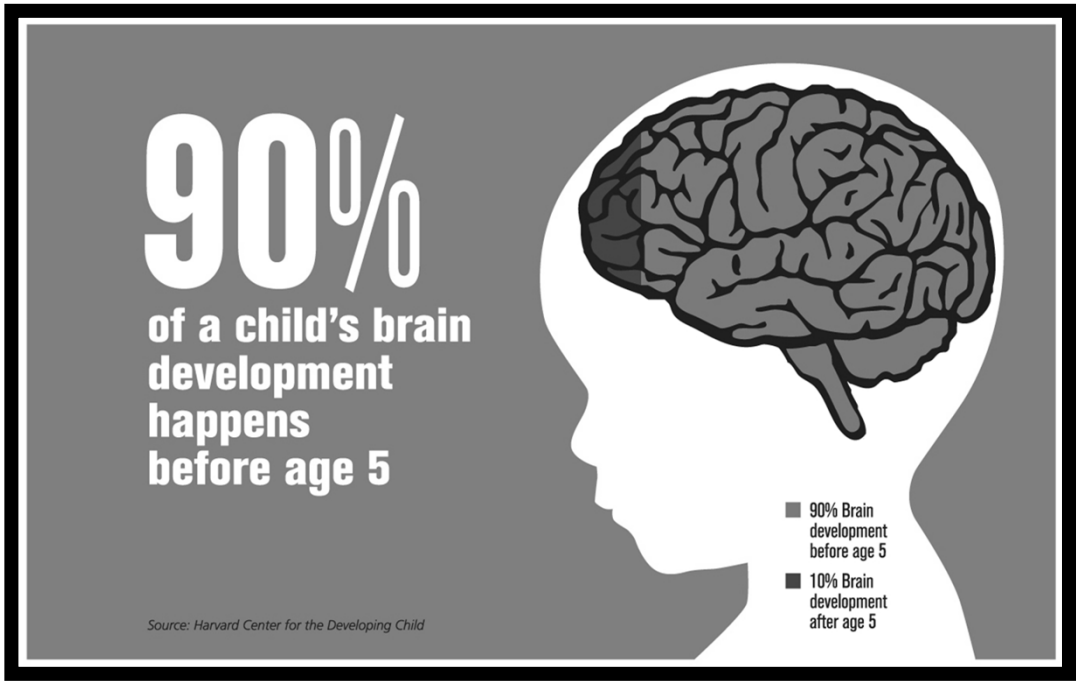
Keywords Autism · Early Start Denver Model · Early

Introduction

The Early Start Denver Model (ESDM) is a comprehensive intervention program for young children with Autism Spectrum Disorder (ASD) that uses a Naturalistic Developmental Behavioral approach (Schreibman et al. 2015) to address early symptoms of ASD across multiple developmental domains (Rogers and Dawson 2010). A randomized controlled trial of ESDM (Dawson et al. 2010) documented significant gains in cognitive, language, and adaptive abilities, but no significant reductions in ASD symptom severity in a group of pre-schoolers with ASD receiving 15 h per week of individual home-based treatment over 2 years. Effect sizes ranged from medium to large, and gains were maintained 2 years after the intervention ended, with additional improvements in ASD symptom severity of a medium effect size occurring during the follow-up period relative to the comparison group (Estes et al. 2015). A

Neurodesarrollo y Neuroplasticidad

- La intervención de una alteración del neurodesarrollo debe seguir principios del ***desarrollo evolutivo***, las ciencias del ***aprendizaje*** y de la ***neurociencia***.



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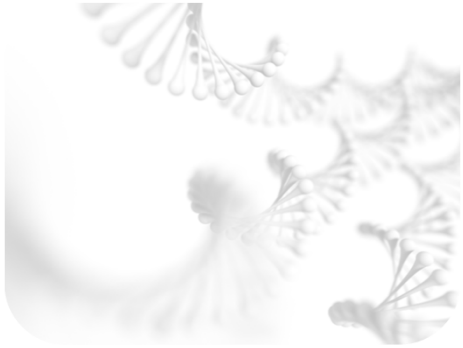
La hipótesis de la motivación social



Afectación en el circuito neural de **recompensa social**

Falta de **relevancia** de recompensas sociales

Déficits en la **aproximación social, atención y aprendizaje**

Incrementa la "**deprivación social/aislamiento**" debido a los efectos TEA

Altera el curso del desarrollo neural y psicológico

Modelo Recompensa Social/ Motivación Social

Mundy & Crowson 1997, Dawson et al., 2004, 2005

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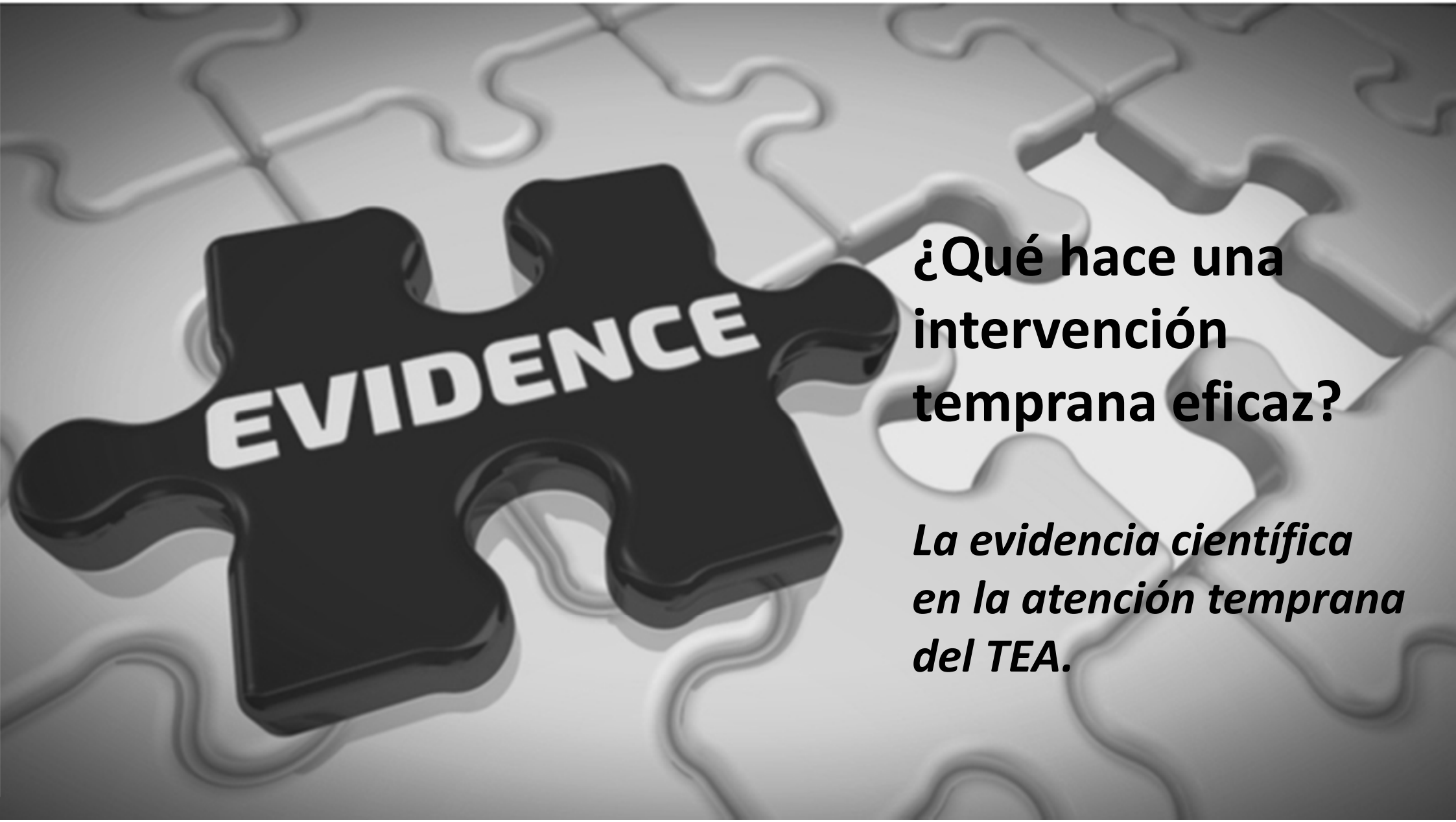
Incrementar la "exposición" relacional = ¡Aumentar el "entrenamiento" de los circuitos sociales! – ESTIMULAR LA MOTIVACIÓN SOCIAL



¿Qué hace una intervención temprana eficaz?

La evidencia científica en la atención temprana del TEA.

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PBE: PRÁCTICA BASADA EN LA EVIDENCIA

https://afirm.fpg.unc.edu/afirm-modules

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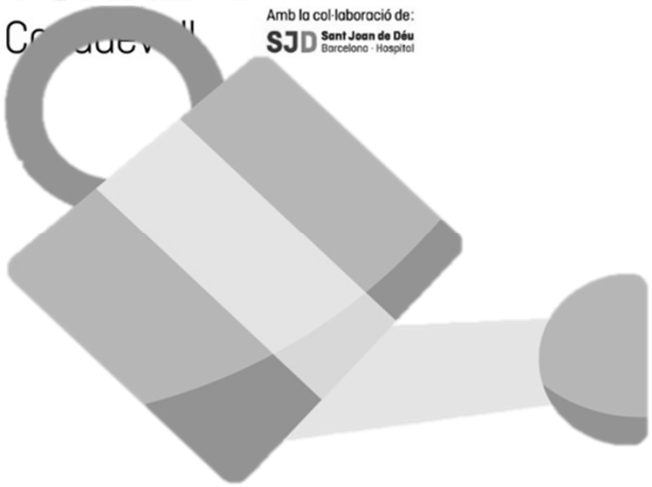
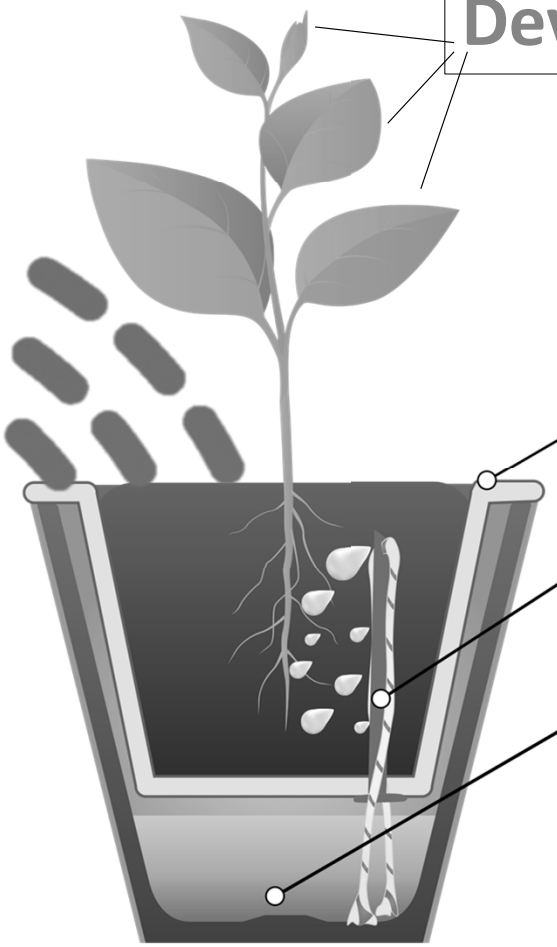
PBE: PRÁCTICA BASADA EN LA EVIDENCIA





Developmental areas

Developmental stage

Context

Individualized Intervention

Sustainability

Implementation

Inspired by the image of
Dr. Liezi Schlebusch

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PARTICIPATORY RESEARCH

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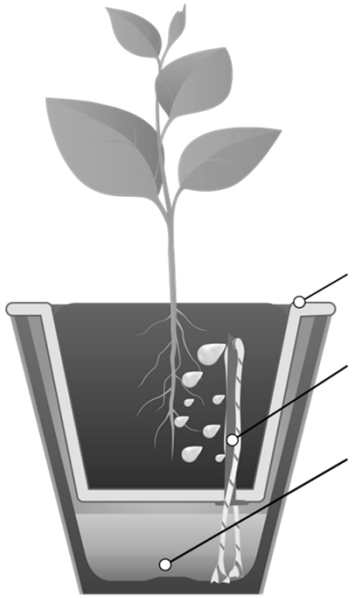

Context

Con el asesoramiento de: UCDAVIS MIND INSTITUTE

Con el apoyo de: Fundación "la Caixa"

¿Qué hace una intervención temprana eficaz?

- La reducción de **sintomatología TEA**…
- Reducción de **problemas de conducta**…
- Mayor capacidad de **adaptación** a las actividades de la vida diaria y sus contextos…
- Mejoras en las distintas **áreas de desarrollo**…
- **Empoderar contexto natural** (padres/madres)

SJI

THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON AUTISM SPECTRUM DISORDERS

https://autismpdc.fpg.unc.edu/evidence-based-practices

- ABOUT THE CENTER
- RESOURCES
- TECHNICAL ASSISTANCE & TRAINING

A multi-university center to promote use of evidence-based practice for children and adolescents with autism spectrum disorders

2009 State Application Now Available

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University of North Carolina

Sam Odom
Principal Investigator
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Sally Rogers
Sally Ozonoff
John Brown

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UNC FPG CHILD DEVELOPMENT INSTITUTE

Slide developed by Dr. Sam Odom, University of North Carolina

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https://autismpdc.fpg.unc.edu/implementation

EBP - Evidence-based Practice	Social			Commun-ication			Joint Attention			Behavior			School-Readiness			Play			Cognitive			Motor			Adaptive			Vocational			Mental			Academic		
	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22
Antecedent-based Interventions (ABI)																																				
Cognitive Behavioral Intervention (CBI)																																				
Differential Reinforcement (DR)																																				
Discrete Trial Training (DTT)																																				
Exercise (ECE)																																				
Extinction (EXT)																																				
Functional Behavior Assessment (FBA)																																				
Functional Communication Training (FCT)																																				
Modeling (MD)																																				
Naturalistic Intervention (NI)																																				
Parent-implemented Interventions (PII)																																				
Peer-mediated Instruction and Intervention (PMII)																																				
Picture Exchange Communication System (PECS)																																				
Pivotal Response Training (PRT)																																				
Prompting (PP)																																				
Reinforcement (R+)																																				
Response Interruption/Redirection (RIR)																																				
Scripting (SC)																																				
Self-management (SM)																																				
Social Narratives (SN)																																				
Social Skills Training (SST)																																				
Structured Play Group (SPG)																																				
Task Analysis (TA)																																				
Technology-aided Instruction and Intervention (TAII)																																				
Time Delay (TD)																																				
Video Modeling (VM)																																				
Visual Support (VS)																																				

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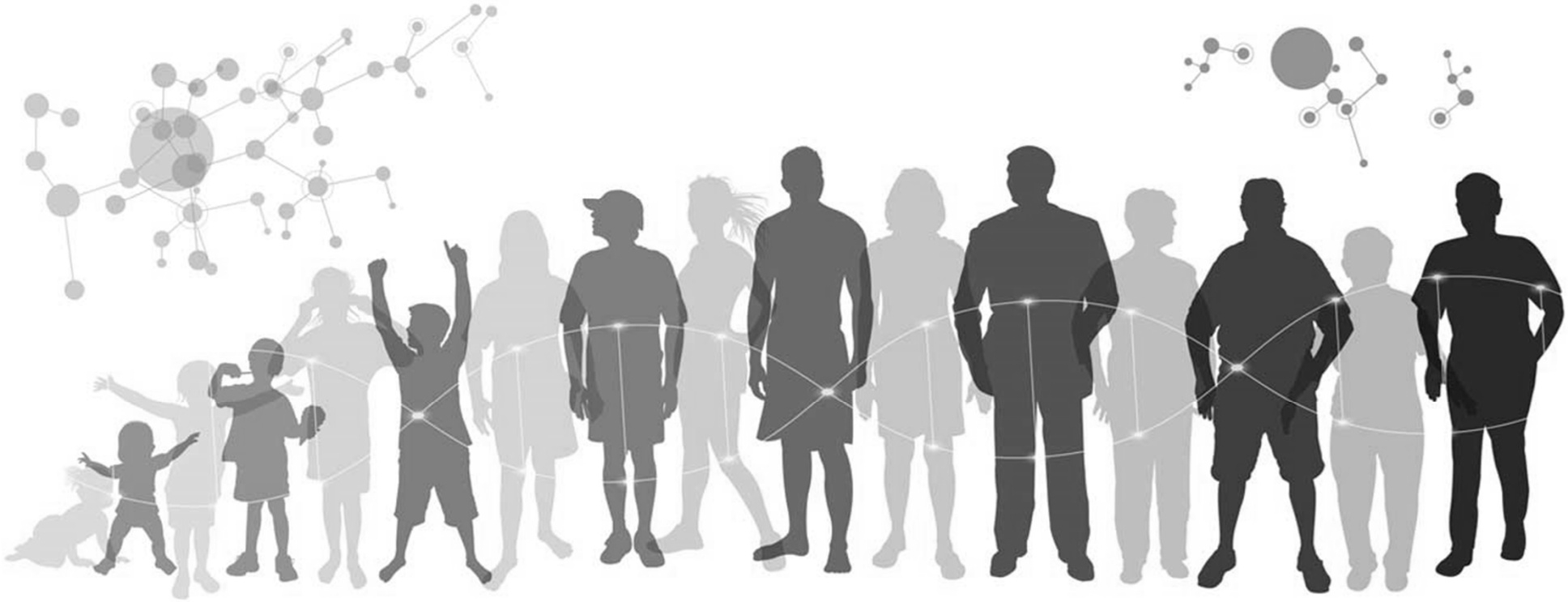

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Lord et al., 2022- *The Lancet Commissions*

The *Lancet* Commission on the future of care and clinical research in autism

Catherine Lord, Tony Charman*, Alexandra Havdahl, Paul Carbone, Evdokia Anagnostou, Brian Boyd, Themba Carr, Petrus J de Vries, Cheryl Dissanayake, Gauri Divan, Christine M Freitag, Marina M Gotelli, Connie Kasari, Martin Knapp, Peter Mundy, Alex Plank, Lawrence Scahill, Chiara Servili, Paul Shattuck, Emily Simonoff, Alison Tepper Singer, Vicky Slonims, Paul P Wang, Maria Celica Yaneelit, Rachel Jellett, Andrew Pickles, James Cusack, Patricia Howlin, Peter Szatmari, Alison Holbrook, Christina Tookan, James B McCauley*

Executive summary

Affecting about 78 million people worldwide, autism is a condition of global importance because of its prevalence and the degree to which it can affect individuals and families. Autism awareness has grown monumentally in the past 20 years, yet most striking is that much more could be done to improve life outcomes for the highly heterogeneous group of people with autism. Such change will depend on investments in science focused on practical clinical issues, and on social and service systems that acknowledge the potential for change and growth as well as the varied, complex needs of the autistic individuals and their families whose lives could be changed with such an effort.

The *Lancet* Commission on the future of care and clinical research in autism aims to answer the question of what can be done in the next 5 years to address the current needs of autistic individuals and families worldwide. Autism is a neurodevelopmental disorder that typically begins to manifest in early childhood and affects social communication and behaviours throughout the life span. Autism and other neurodevelopmental disorders have seen a tremendous influx of interest from the scientific community in the past 60 years. Substantial progress has been made in many areas of basic and applied science, but the limits of the knowledge and understanding of autism are also very clear. For clinical purposes, reviews and guidelines have proliferated, although the data on which many recommendations are based are typically from short-term interventions that address acquisition of specific skills that are hoped—but not yet known with confidence—to contribute to long-term gains across development. However, large gaps around key questions remain, such as what interventions and support strategies are effective for whom and when, and which interventions lead to changes beyond their proximal outcomes. Underlying these outstanding questions is a deep scarcity of information about what are the active elements or mechanisms, behavioural or neurobiological, for change. These issues are particularly important because autism affects from toddlers to elders and is almost always accompanied by other developmental, behavioural, and mental health difficulties or conditions that have major implications for lifelong outcomes.

On top of these issues is the fact that autism affects individuals and families worldwide, most of whom are receiving no support outside of their own resources. If evidence-based approaches to support the lives of autistic children, adolescents, and adults who are living now are to be developed (in contrast to the fervent hopes for neurobiological approaches in the future), knowing what works for whom, when, and at what intensity is imperative, and will allow the design of systems that are cost-effective, affordable, and scalable across the globe. Such approaches are not possible on the basis of the currently existing data, but might become possible in the future.

In response to this challenge, our Commission proposes a novel, modified stepped care and personalised health model of intervention and assessment for individuals with autism and their families. One important necessity (but not always considered in such models) is that treatment and support takes into account the preferences, needs, and costs (financial and otherwise) to individuals and families at each step. These individual differences across autistic children, adolescents, adults, and their families are nested within communities, cultures, and social systems that must also be considered.

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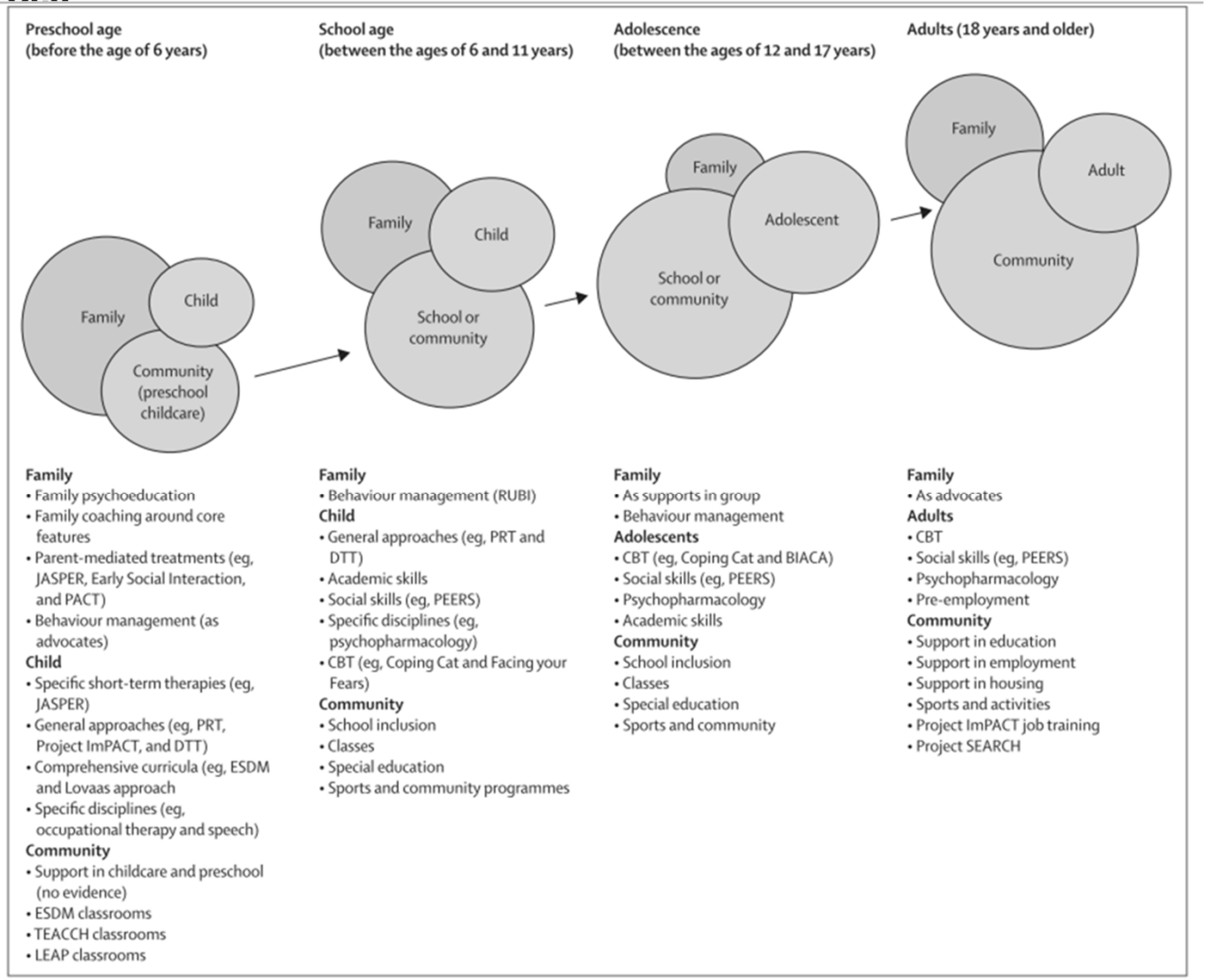
See Comment pages 215 and 217
See Perspectives pages 228 and 229

*Commission chairs
University of California, Los Angeles, CA, USA (Prof C Lord PhD, Prof F C Kasari PhD, A Holbrook PhD, C Tookan PhD); Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, UK (Prof T Charman PhD, Prof E Simonoff MD, Prof A Pickles PhD, Prof P Howlin PhD); Evelina Children's Hospital, Guy's and St Thomas' NHS Foundation

Key messages

- At least 78 million people worldwide have autism; the majority do not receive support from, or have access to, adequate health care, education, and social care services
- Children and adults with autism can have happy and healthy lives, but urgent action is required to promote these outcomes
- Autism is heterogeneous and requires personalised, evidence-based assessments and interventions, accessible and affordable to every person, that can improve the lives of individuals and their families
- People with autism have complex needs; meeting these needs requires government coordination between health care, education, finance, and social sectors across the life span, and active inclusion and participation of autistic people and their families
- A stepped care and personalised health approach to delivering services and monitoring effectiveness across time provides a framework for efficient and equitable distribution of resources to improve outcomes
- More information about the economic and personal consequences of autism is urgently needed to inform the case for government and societal investment, action, and support worldwide
- People with autism and those with other neurodevelopmental conditions have many similar needs; developing appropriate systems of care for people with autism will also improve outcomes for individuals with other neurodevelopmental conditions
- Valuing autism and neurodiversity benefits society as a whole
- Research that will result in immediate improvements in the lives of people with autism and their families should be prioritised

Lord et al., 2022- *The Lancet Commissions*



Preschool age (before the age of 6 years)

Family
- Family psychoeducation
- Family coaching around core features
- Parent-mediated treatments (eg, JASPER, Early Social Interaction, and PACT)
- Behaviour management (as advocates)

Child
- Specific short-term therapies (eg, JASPER)
- General approaches (eg, PRT, Project ImPACT, and DTT)
- Comprehensive curricula (eg, ESDM and Lovaas approach
- Specific disciplines (eg, occupational therapy and speech)

Community
- Support in childcare and preschool (no evidence)
- ESDM classrooms
- TEACCH classrooms
- LEAP classrooms

School age (between the ages of 6 and 11 years)

Family
- Behaviour management (RUBI)

Child
- General approaches (eg, PRT and DTT)
- Academic skills
- Social skills (eg, PEERS)
- Specific disciplines (eg, psychopharmacology)
- CBT (eg, Coping Cat and Facing your Fears)

Community
- School inclusion
- Classes
- Special education
- Sports and community programmes

Adolescence (between the ages of 12 and 17 years)

Family
- As supports in group
- Behaviour management

Adolescents
- CBT (eg, Coping Cat and BIACA)
- Social skills (eg, PEERS)
- Psychopharmacology
- Academic skills

Community
- School inclusion
- Classes
- Special education
- Sports and community

Adults (18 years and older)

Family
- As advocates

Adults
- CBT
- Social skills (eg, PEERS)
- Psychopharmacology
- Pre-employment

Community
- Support in education
- Support in employment
- Support in housing
- Sports and activities
- Project ImPACT job training
- Project SEARCH

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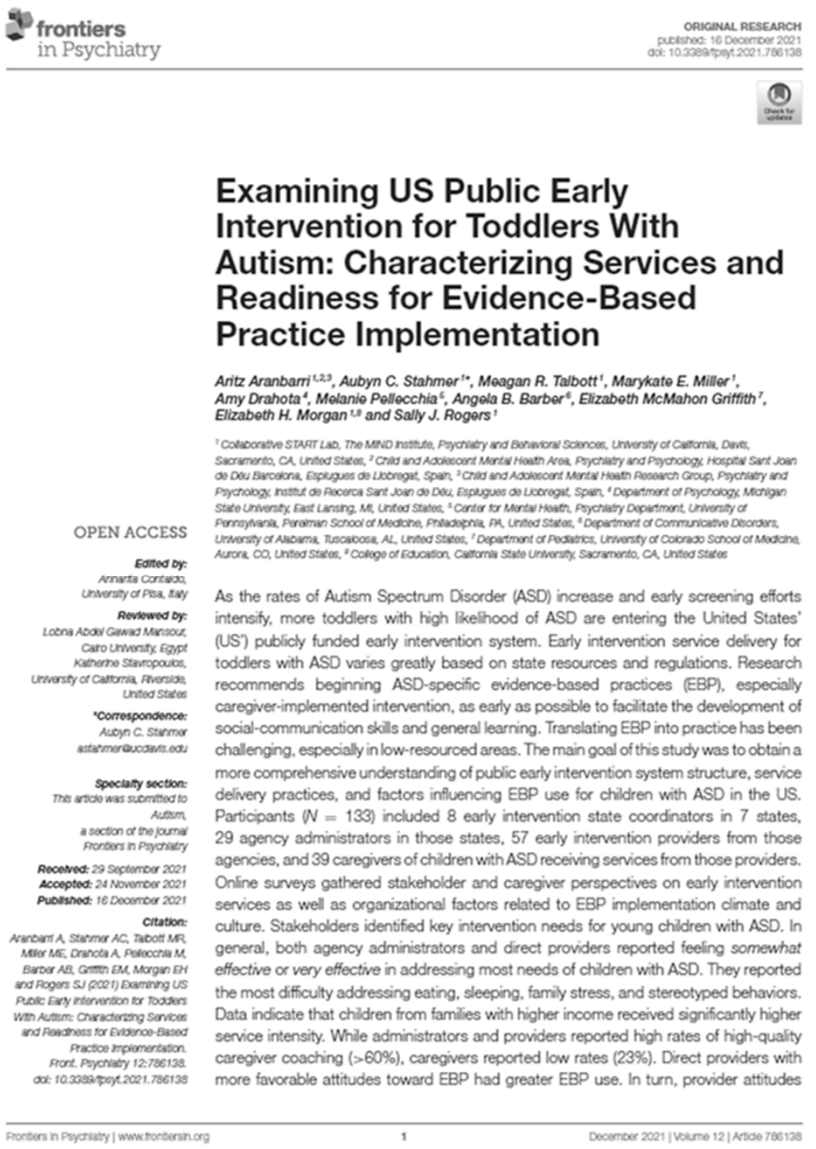
Aranbarri A, Stahmer AC, Talbott MR, Miller ME, Drahota A, Pellecchia M, Barber AB, Griffith EM, Morgan EH, Rogers SJ. **Examining US Public Early Intervention for Toddlers With Autism: Characterizing Services and Readiness for Evidence-Based Practice Implementation**. *Frontiers in psychiatry*. 2021;12.



frontiers in Psychiatry

ORIGINAL RESEARCH
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Examining US Public Early Intervention for Toddlers With Autism: Characterizing Services and Readiness for Evidence-Based Practice Implementation

Aritz Aranbarri[1,2,3], Aubyn C. Stahmer[1], Meagan R. Talbott[1], Marykate E. Miller[1], Amy Drahota[4], Melanie Pellecchia[5], Angela B. Barber[6], Elizabeth McMahon Griffith[7], Elizabeth H. Morgan[1,8] and Sally J. Rogers[1]*

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As the rates of Autism Spectrum Disorder (ASD) increase and early screening efforts intensify, more toddlers with high likelihood of ASD are entering the United States' (US') publicly funded early intervention system. Early intervention service delivery for toddlers with ASD varies greatly based on state resources and regulations. Research recommends beginning ASD-specific evidence-based practices (EBP), especially caregiver-implemented intervention, as early as possible to facilitate the development of social-communication skills and general learning. Translating EBP into practice has been challenging, especially in low-resourced areas. The main goal of this study was to obtain a more comprehensive understanding of public early intervention system structure, service delivery practices, and factors influencing EBP use for children with ASD in the US. Participants ($N = 133$) included 8 early intervention state coordinators in 7 states, 29 agency administrators in those states, 57 early intervention providers from those agencies, and 39 caregivers of children with ASD receiving services from those providers. Online surveys gathered stakeholder and caregiver perspectives on early intervention services as well as organizational factors related to EBP implementation climate and culture. Stakeholders identified key intervention needs for young children with ASD. In general, both agency administrators and direct providers reported feeling *somewhat effective* or *very effective* in addressing most needs of children with ASD. They reported the most difficulty addressing eating, sleeping, family stress, and stereotyped behaviors. Data indicate that children from families with higher income received significantly higher service intensity. While administrators and providers reported high rates of high-quality caregiver coaching (>60%), caregivers reported low rates (23%). Direct providers with more favorable attitudes toward EBP had greater EBP use. In turn, provider attitudes

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Los modelos NDBI: *Naturalistic Developmental Behavioral Interventions*.

Elementos de intervención comunes e indicadores de calidad

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Elementos comunes de los NDBIs

J Autism Dev Disord (2015) 45:2411–2428
DOI 10.1007/s10803-015-2407-8

CrossMark

ORIGINAL PAPER

Naturalistic Developmental Behavioral Interventions: Empirically Validated Treatments for Autism Spectrum Disorder

Laura Schreibman · Geraldine Dawson · Aubyn C. Stahmer · Rebecca Landa · Sally J. Rogers · Gail G. McGee · Connie Kasari · Brooke Ingersoll · Ann P. Kaiser · Yvonne Bruinsma · Erin McNerney · Amy Wetherby · Alycia Halladay

Published online: 4 March 2015

Abstract Earlier autism diagnosis, the importance of early intervention, and development of specific interventions for young children have contributed to the emergence of similar, empirically supported, autism interventions that represent the merging of applied behavioral and developmental sciences. "Naturalistic Developmental Behavioral Interventions (NDBI)" are implemented in natural settings, involve shared control between child and therapist, utilize natural contingencies, and use a variety of behavioral strategies to teach developmentally appropriate and prerequisite skills. We describe the development of NDBIs, their theoretical bases, empirical support, requisite characteristics, common features, and suggest future research needs. We wish to bring parsimony to a field that includes interventions with different names but common features thus improving understanding and choice-making among families, service providers and referring agencies.

Keywords Early intervention · Naturalistic · Developmental · Behavioral

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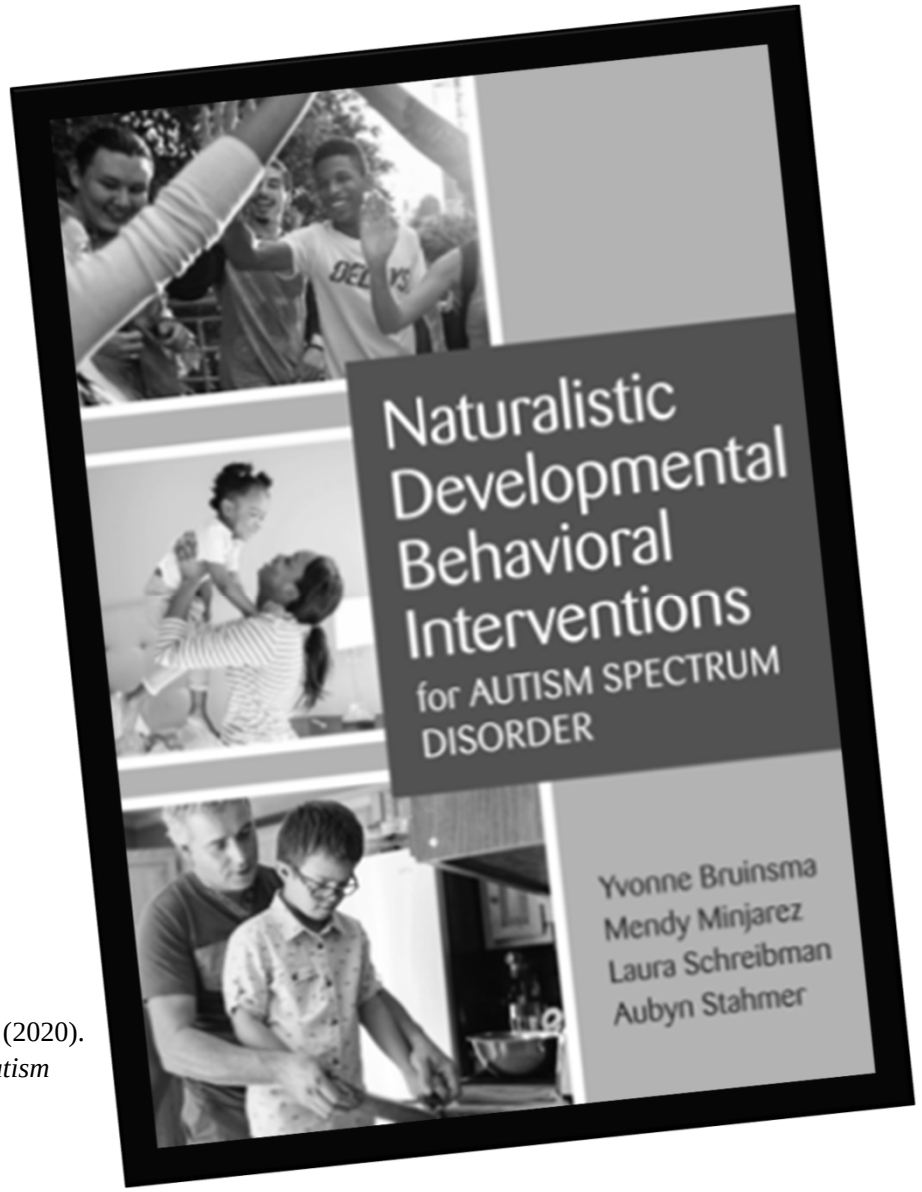

Bruinsma, Y., Minjarez, M., Schreibman, L., & Stahmer, A. (2020). *Naturalistic Developmental Behavioral Interventions for Autism Spectrum Disorder.* Baltimore, USA: Brookes Publishing.

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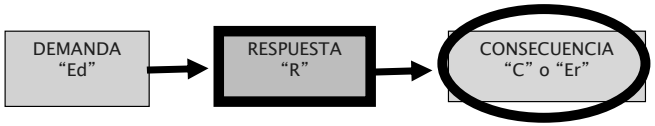
Early Intensive Behavioral Intervention (EIBI)



- Centrado en el ensayo discreto
- Intervención dirigida por terapeuta
- Se trabaja conducta a conducta
- Se centra en las consecuencias
- Programa manualizado y protocolarizado

Naturalistic Developmental Behavioral Interventions (NDBI)

- Aprendizaje en contexto natural y a base de refuerzos naturales
- Estrategias de enseñanza basadas en el desarrollo
- Control compartido entre el niño y el terapeuta
- Combina evidencia conductual, del desarrollo y apego

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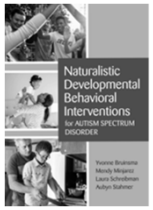
Elementos comunes de los NDBIs



Componentes Principales	Estrategias de intervención	Objetivos de intervención
1. Seleccionar **objetivos de intervención** significativos para el contexto natural 2. Empoderamiento a **padres** a través de la formación y el coaching (centrado en familia) 3. Apoyar la **inclusión** con iguales y en la comunidad	1. Estrategias basadas en la **motivación del niño**. 2. Estrategias centradas en el **control del antecedente**. 3. Estrategias de **enseñanza con presiones**. 4. Estrategias de **refuerzo natural**.	1. Objetivos de intervención **basados en la necesidad de desarrollo**. 2. Reforzar las **habilidades comunicativas**. 3. Desarrollar las **habilidades sociales** y de **juego diádico**. 4. Apoyo positivo de la **conducta adaptativa** y la **autorregulación**.

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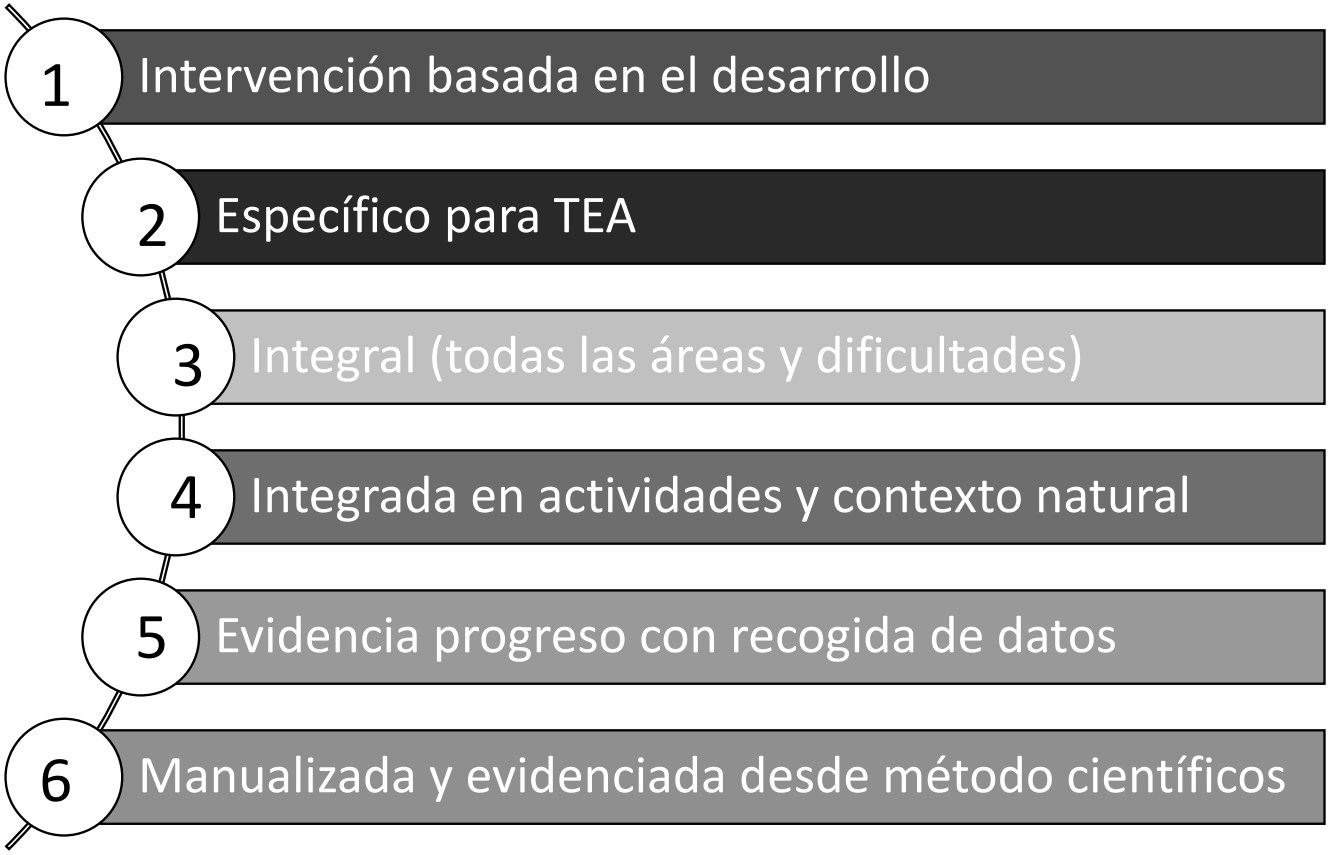
¿INTERESADO/A EN LA FORMACIÓN OFICIAL DEL ESDM?

ESDM
Early Start Denver Model

https://www.esdm.co/attendworkshop

6 elementos destacables del ESDM



IMPLEMENTACIÓN NATURALISTA

Nivel de desarrollo

Objetivos MEDIBLES e individualizados y acordados con los padres.

Rutinas de juego (preescolar y domicilio) basados en estrategias evidenciadas en ESDM

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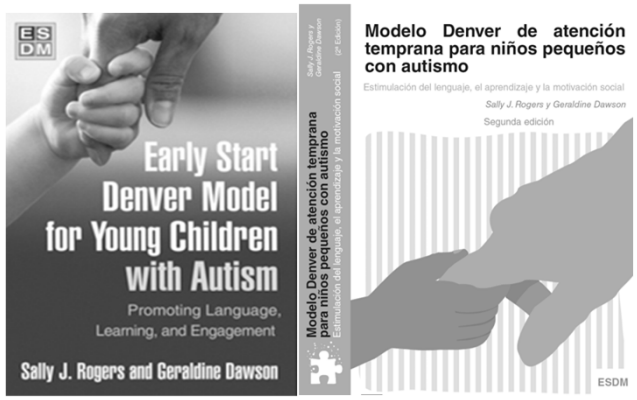
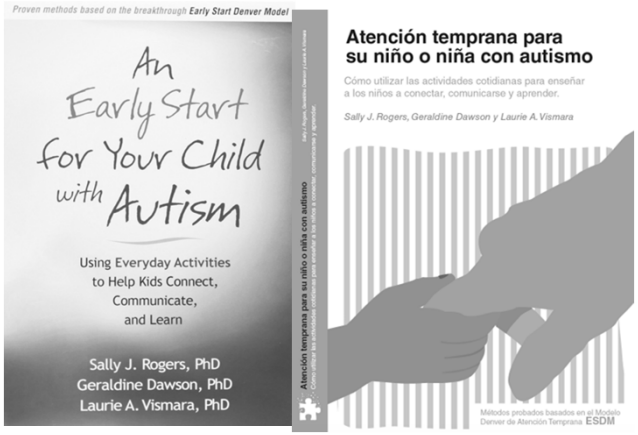
Diversas modalidades de implementación, según contexto





Diversas modalidades de implementación, según contexto

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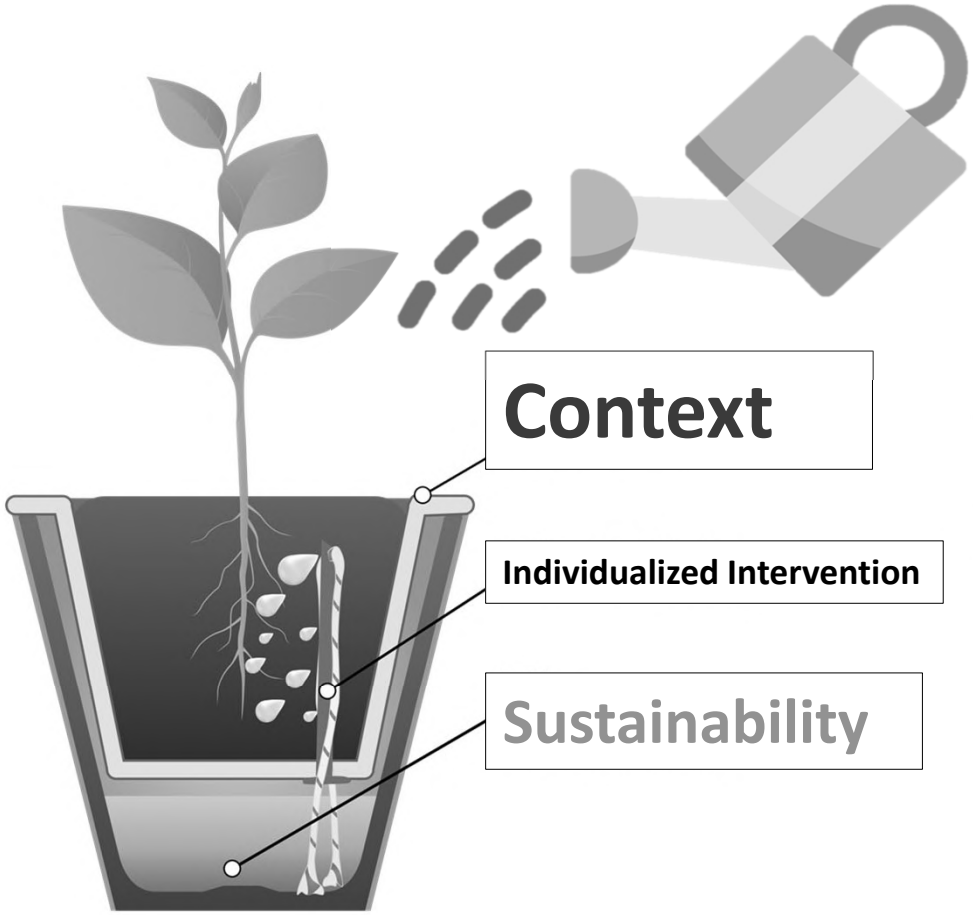
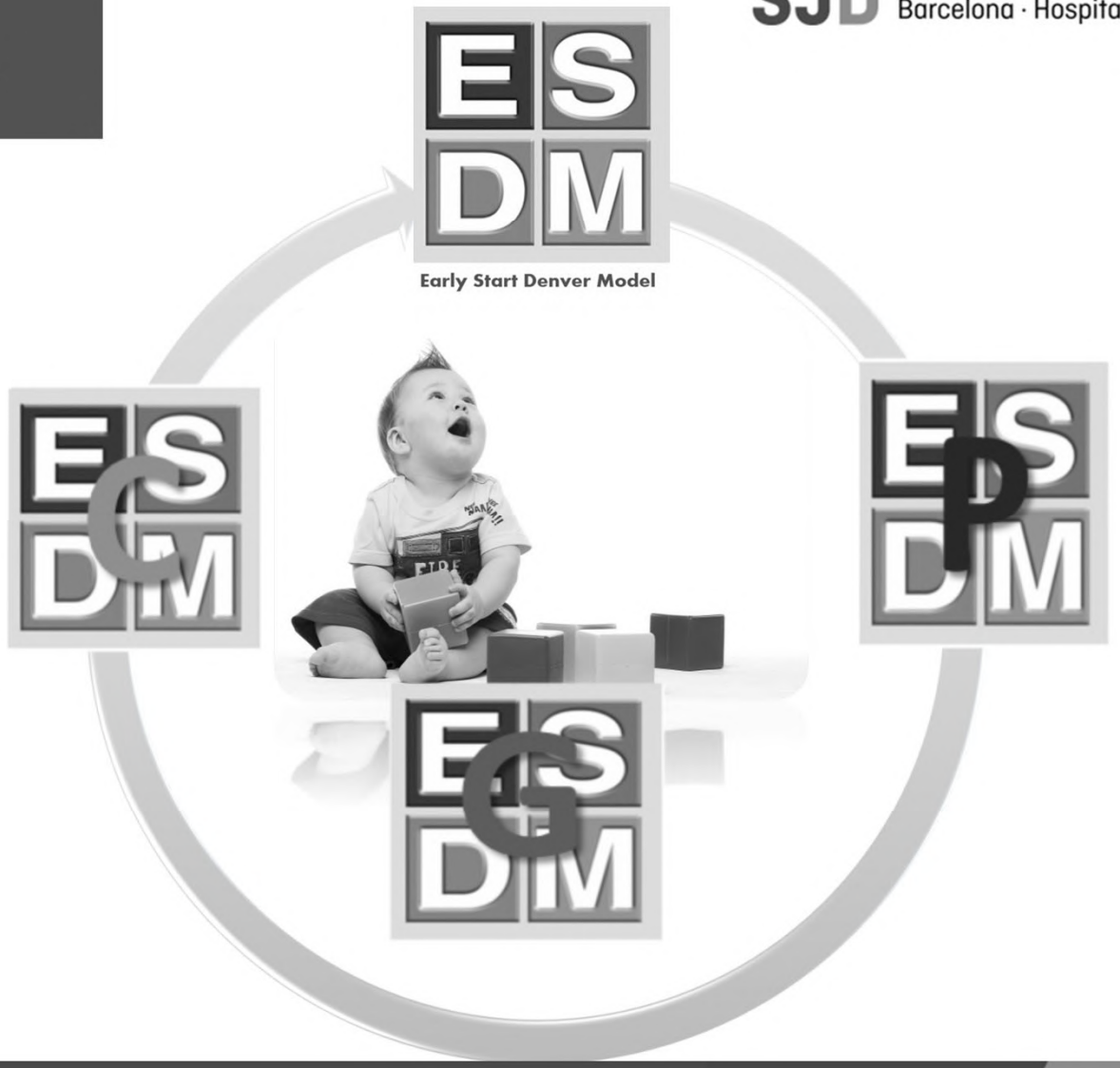


Context

Individualized Intervention

Sustainability



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Barcelona · Hospital

ESDM

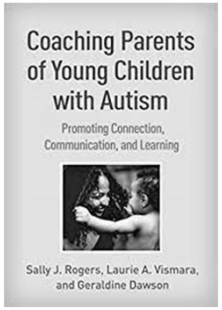
Early Start Denver Model

PROJECT

Dras. Sally Rogers y Aubyn Stahmer

INSTITUT TEA CARE
Mas Casadevall

Amb la col·laboració de:
SJD Sant Joan de Déu Barcelona · Hospital



Programa

Coordinadores:
Directora: María Díez-Juan
Investigador Principal: Aritz Aranbarri

Asesor científico: MIND Institute
Promotores del proyecto: FAMC

TEA CARE$^{0-4}$ Mas Casadevall

*Programa **C**línic d'**A**tenció a l'**A**utisme basat en la **R**ecerca i l'**E**ducació –**M**as **C**asadevall (0-4 anys)*

Con el asesoramiento de: UCDAVIS MIND INSTITUTE

Con el apoyo de: Fundación "la Caixa"

INSTITUT TEA CARE
Mas Casadevall

Amb la col·laboració de:
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Empoderar a las familias atendidas en estrategias de intervención temprana que repercutan en el neurodesarrollo de sus hijos e hijas en colaboración con los recursos comunitarios

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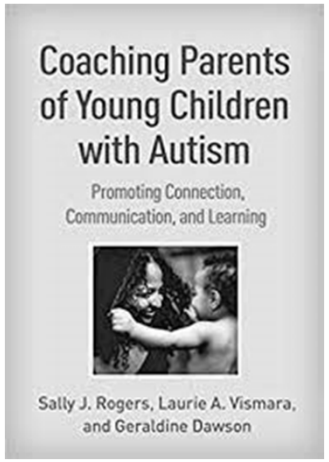
En el TEA CARE Mas Casadevall pretendemos investigar una intervención temprana mediada por la familia

ESDM
Early Start Denver Model



Con el asesoramiento de: UCDAVIS MIND INSTITUTE

Con el apoyo de: Fundación "la Caixa"

INSTITUT TEA CARE

Mas Casadevall

Amb la col·lab

SJD

SJD Sant Joan de Déu
Barcelona · Hospital

Atención temprana en el contexto de TEA

Detección e intervención en la primera infancia

PREGUNTAS

SJD Sant Joan de Déu
Barcelona · Hospital

Detección e Intervención Temprana en TEA

Dr. Aritz Aranbarri

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23 de febrero de 2023

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Mas Casadevall

Amb la col·laboració de:
SJD Sant Joan de Déu Barcelona · Hospital