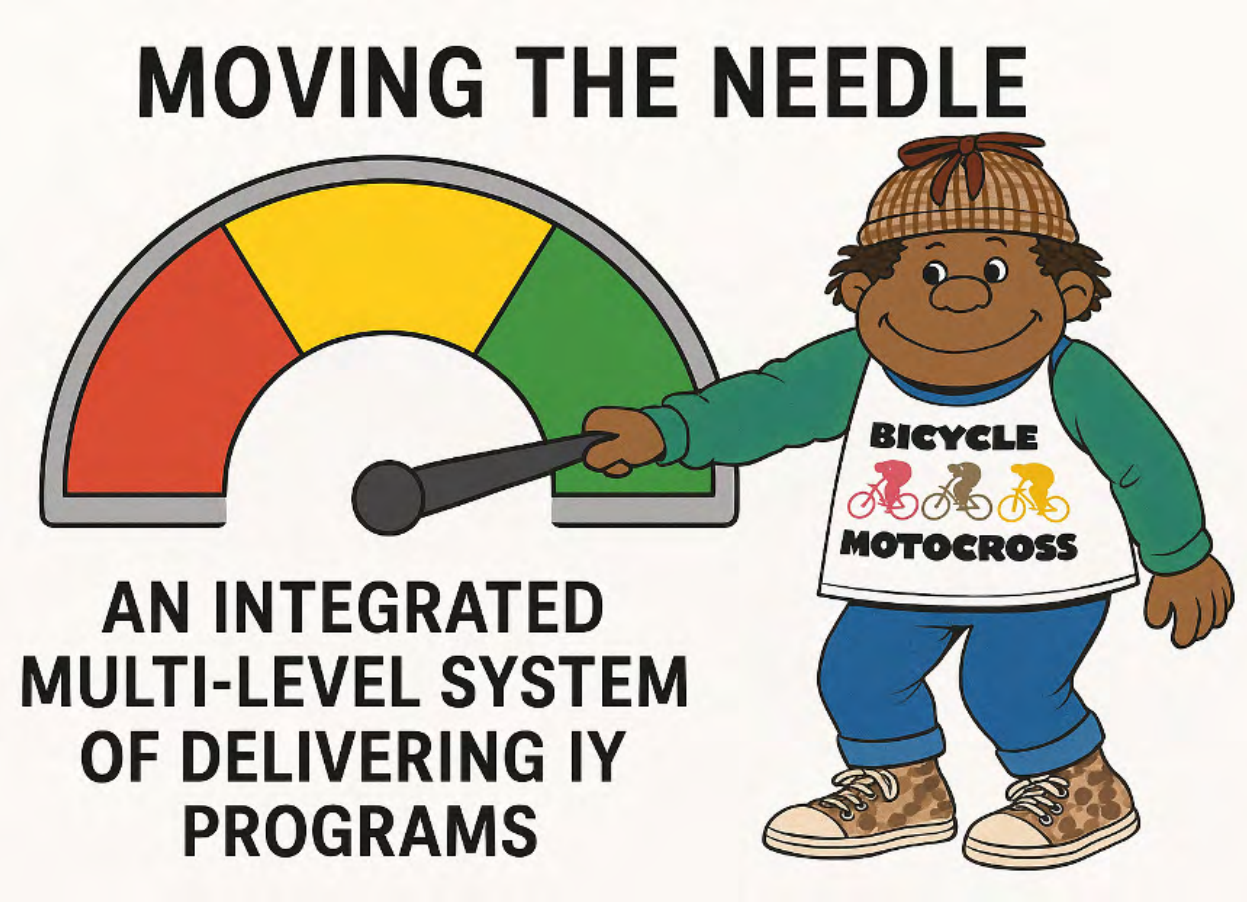
The Incredible Years®

2025 Incredible Years®
21st Mentor Meeting

Los Angeles, California



Information for your stay:

Conference Venue: Children's Hospital Los Angeles,
EDUCTATION & TRAINING CENTER #623
3250 Wilshire Blvd, Suite 623, Los Angeles, CA 90010

Final Celebration Dinner: Dr. Dean Coffey & Steve Moss's house
Dean Coffey & Steve Moss, 3195 Verdugo Pl, Los Angeles, CA 90065

Restaurants nearby:

Guelaguetza Oaxacan Restaurant, 3014 W Olympic Blvd, Los Angeles, CA 90006
Phone: (213) 427-0608
Menu: https://www.ilovemole.com/

Quarters Korean BBQ, 3465 W 6th St #C-130, Los Angeles, CA 90020
Phone: +1 213-365-8111
Menu/Reservations: https://www.quarterskbbq.com/

Cassell's Hamburgers, 3600 W 6th St, Los Angeles, CA 90020
Phone: (213) 387-5502
Menu: https://www.cassellshamburgers.com/

The Boiling Crab, 3377 Wilshire Blvd UNIT 115, Los Angeles, CA 90010
Phone: +1 213-389-2722
Menu: https://theboilingcrab.com/

The Openaire Restaurant: located at the Line hotel, 3515 Wilshire Blvd, Los Angeles
Phone: +1 (213)-368-3065
Menu/Reservations: https://www.thelinehotel.com/los-angeles/restaurants-bars/openaire/

Los Angeles city sights:

The Academy Museum of Motion Pictures: 6067 Wilshire Boulevard Los Angeles, CA 90036; https://www.academymuseum.org/en

The Getty Museum: 1200 Getty Center Dr, Los Angeles, CA 90049
https://www.getty.edu/

Griffith Observatory: 2800 E Observatory Rd, Los Angeles, CA 90027
https://griffithobservatory.org/

Los Angeles County Museum of Art: 5905 Wilshire Blvd., Los Angeles, CA 90036
https://www.lacma.org/

La Brea Tar Pits and Museum: 5801 Wilshire Blvd, Los Angeles, CA 90036
https://tarpits.org/

Universal Studios Hollywood: 100 Universal City Plaza, Universal City, CA 91608
https://www.universalstudioshollywood.com/web/en/us

2025 Incredible Years®
21st Mentor Meeting
Moving the Needle:
An Integrated Multi-Level System of Delivering IY Programs

WELCOME!

WELCOME TO THE INCREDIBLE YEARS® 2025 MENTOR MEETING at Children's Hospital Los Angeles!

Conference Venue: Children's Hospital Los Angeles,
Education & Training Center #623
3250 Wilshire Blvd, Suite 623, Los Angeles, CA 90010

We're thrilled to see you all and glad you made the trip to sunny Los Angeles, California! This year's theme is **Moving the Needle: An Integrated Multi-Level System of Delivering IY Programs.**

Welcome Reception Tuesday Night:
Carolyn will host an informal welcome wine and cheese open house in her room, the **City View Suite** at the Line Hotel, 3515 Wilshire Blvd, Los Angeles, CA 90010, **from 6pm - 8pm on Tuesday night**.

Meeting Location:
We'll gather in the CHLA 6th Floor Education & Training Center, Conference Room #623, along with several nearby breakout rooms.

Agenda Overview:
Our agenda includes meeting each morning for research presentations followed by afternoons in large group & break out rooms to share video clips of mentor workshops, peer coaching and group leaders. Carolyn will also be sharing selected new video clips she has developed for the updated Preschool Basic 2.0 program and is eager for your feedback. Some of these video clips seem to be very relevant for the teacher & child training programs.

Wednesday, September 17th:
Please plan to arrive at CHLA at 8am for coffee. We'll begin the meeting at 8:30am with introductions and a celebration of mentor accomplishments, followed by presentations on Parent Program implementations. Lunch will be brought in each day so that we can spend lunches together. After lunch, we'll regroup for learning more about the Preschool Basic 2.0 Program. Later, we'll move into small groups to share training session videos. Please check your agenda for group assignments.

Video Review Groups:
For each video review group, there will be **a coach and a presenter**. Please review the **Coach/Presenter** document in the handouts. It will be the coach's job to find out the

presenter's goals, structure the session, facilitate brainstorming, set up role plays, and make sure that the presenter feels comfortable and supported.

The final few minutes of each small group will be used to summarize key concepts, which will be shared during the large group meeting at 4:30 PM.

The day wraps at 5:00 PM, after which you're free to relax and connect. Carolyn is happy to meet with individual mentors for any issues relevant to your organization or country at that time.

Thursday & Friday:
Mornings will again begin in the main conference room with presentations. Afternoons will include large and small group break-outs — refer to the agenda for group assignments.

Lunches: These will be delivered to you in a deck space in the building. Follow our LA leaders.

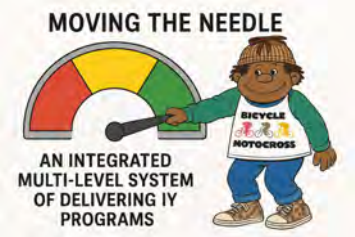
Evening Plans:
Dinner on Wednesday and Thursday will be arranged on your own in town. We hope that you will take this time to visit with old friends and make new ones. Try to make sure that all mentors are included in a dinner group. If you need a dinner buddy, please ask someone. We promise that you will be welcome in this nurturing and inclusive group of incredible mentors! We are lucky to have Dean, Siliva, Micah and Emily, who can help us know about their favorite dinner spots.

On Friday, our meeting will end at 5 pm. After that we will meet together for our final celebration dinner at Dean Coffey's house, at 6:30 pm. 3195 Verdugo Pl, Los Angeles, CA 90065

Please let us know if you need anything during the week!

- Carolyn and The Incredible Years Team

The Incredible Years®



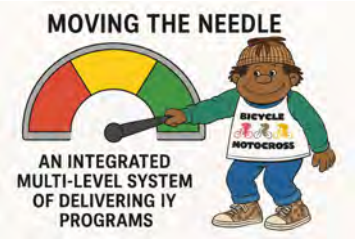
2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

AGENDA

WEDNESDAY, September 17th

TIME	ACTIVITY/PRESENTER	LOCATION
8:00-8:30	Mentors arrive to Children's Hospital Los Angeles - coffee	Conference Room #623
8:30-9:30	Carolyn Webster-Stratton: Welcome & Introductions *Moving the Needle Forward: Even when it seems stuck*	Conference Room #623
9:30-10:15	Joyce Javier, MD: *Together We Thrive: Collaborative Efforts in Enhancing Filipino Family Well-being Using the Incredible Years Parent Programs*	Conference Room #623
10:15-10:30	Break	
10:30-11:15	Sean McDonnell & Annemarie Ó Murchú: *The Changing Face of IY Delivery in Ireland, the Zoom Perspective* (via Zoom)	Conference Room #623
11:15-12:00	Nina Simola: Update on Dissemination of TCM & Basic Parent Program in Finland	Conference Room #623
12:00-1:00	Lunch together at CHLA	
1:00-3:00	Carolyn Webster-Stratton: Moving the Needle Forward: Stitching Innovation with Fidelity - Preschool Basic 2.0 Programs 1 & 2	Conference Room #623
3:00-3:15	Break	
3:15-4:15	Small Group Break-Out & Video Review Groups	
Needles Thread Tape Measure	Parent Parent Teacher/Child	Dean Video/Lee Coach Jenny Video/Cathy Coach Micah Video/Sheila Coach
4:15-4:30	Small groups discuss questions & review take-home message to present at 4:30pm	
4:30-5:00	Return to Conference room for small group gems and wrap-up	Conference Room #623
5:00	Social Time. Dinner: make your own arrangements	

SEE NEXT PAGE FOR SMALL GROUP BREAKOUT GROUPS



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

SMALL GROUPS

*** NOTE TAKER & TIME KEEPER**

NEEDLES:

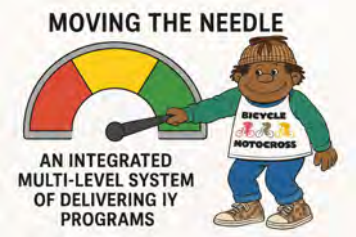
Silvia*
Dean
Indrė
Ceth
Lee

THREAD:

Emily*
Carina
Jenny
Cathy
Nina
Päivi

TAPE MEASURE:

Micah*
Heather
Sheila
Catherine
Kathleen

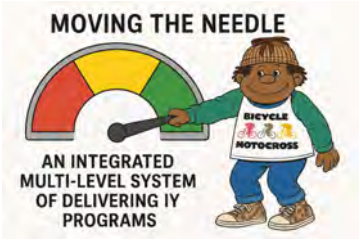


2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

AGENDA

THURSDAY, September 18th

TIME	ACTIVITY/PRESENTER	LOCATION
8:00-8:30	Mentors arrive to CHLA - coffee	Conference Room #623
8:30-10:45	Dean Coffey & Panel: Adding Value: Promoting Multi-disciplinary Dissemination of IY Programs with Fidelity (90 minutes)	Conference Room #623
10:00-10:15	Break	
10:00-10:45	Indrė Steponavičiūtė-Kupčinskė: *The Incredible Years Parent Program in Lithuania*	Conference Room #623
11:15-12:00	Carolyn Webster-Stratton & Kathleen Corrigan: Moving the Needle with On-Line and In-Person Training	Conference Room #623
12:00-1:00	Lunch together at CHLA	
1:00-3:00	Carolyn Webster-Stratton: Preschool Basic 2.0 Program 3	Conference Room #623
3:00-3:15	Break	
3:15-4:15	Small Group Break-Out & Video Review Groups	Smaller Rooms
Needles Thread Tape Measure	Parent/Teacher — Lee Video/Silvia Coach Parent — Nina Video/Emily Coach Teacher/Child — Sheila Video/Catherine Coach	
4:15-4:30	Small groups discuss questions & review take-home message to present at 4:30pm	
4:30-5:00	Return to Conference Room for small group gems and wrap-up	Conference Room #623
5:00	Social Time. Dinner: make your own arrangements	



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

Panel Discussion

Adding Value: Promoting Multi-disciplinary Dissemination of IY Parent Programs with Fidelity

Abstract

Evidence-based treatments (EBT) are techniques and interventions, when implemented with fidelity, yield reliable outcomes based on demonstrated research evidence. Evidence-based practice (EBP) is a broader term that includes clinical practice informed by research, clinical expertise, patient needs and decision-making (APA, 2006). Research and clinical practice form the knowledge base for evidence-based practice (Kazdin, 2008).

The Incredible Years® (IY) is an EBT with a well-established history of high-quality research and treatment outcomes. Examples of its implementation as an EBP with fidelity are the incorporation of adaptation for the cultural context of each family with sensitivity to the child's developmental, academic, and social-emotional needs; as well as the use of ongoing consultation following initial training (Webster-Stratton, 2015).

Children's Hospital Los Angeles (CHLA) has a long history of implementing IY parent training programs with fidelity within the context of multi-disciplinary training. This panel presentation will present the opportunity to explore with representatives of different health professions how participation in training and leadership of groups impacts their clinical practice.

The following presenters were given questions regarding their disciplines, training, IY Programs delivered, fidelity, perspective, culture, barriers, and the future to prepare in advance of the panel discussion at the Incredible Years Mentor Retreat to be held at CHLA in September 2025:

Presenters

Karen Camero, MD, MACM
Karen Camero is a general pediatrician at Children's Hospital Los Angeles (CHLA) and AltaMed Health Services. She completed medical school in Venezuela and completed her Pediatric Residency and Health Equity Fellowship at CHLA. She also has a Masters in Academic Medicine from the University of Southern California and enjoys working with learners of every level (medical students, residents, fellows). Dr. Camero has been leading Incredible Years Baby and Toddler workshops for the past 4 years in both English and Spanish. Her other interests include: the impact of social drivers of health on the Latinx population and pediatric anticipatory guidance.

Jessica Y. Gonzalez, MS, CCC-SLP
Jessica Y. Gonzalez, MS, CCC-SLP is a dedicated Speech Language Pathologist (SLP) with expertise in evaluation, assessment, and treatment planning across a range of pediatric functional needs relating to communicative and developmental disorders. She has served as an SLP for over ten years at CHLA working with children and adolescents through the USC University Center for Excellence in Developmental Disabilities (USC UCEDD). Her professional interests include bilingualism, augmentative and alternative communication, and parent training programs. Jessica received a bachelor's degree in Communication Studies with a double major in Spanish from Loyola Marymount University, and a master's degree in Communicative Disorders from the University of Redlands.

Aviril (Apple) Sepulveda, OTD, OTR/L, BCP, SCFES
Dr. Sepulveda is a board-certified pediatric occupational therapist with over 18 years of experience in the field. She completed a clinical doctoral degree in occupational therapy from the USC Chan Division of Occupational Science and Occupational Therapy. She is also a fellow of the Robert Wood Johnson Clinical Scholars Program. The project involves working on decreasing mental health stigma in immigrant Filipino families through community-partnered participatory research using the Incredible Years Parenting Program.

Vasni Y. Briones, LCSW
Vasni Y. Briones, LCSW, is a Licensed Clinical Social Worker with a Master's degree in Social Work from the University of Southern California (USC) with an emphasis in children, youth and families. Vasni has over 15 years of experience working with children and families. She currently works in the Community Behavioral Health Program of Children's Hospital Los Angeles / Behavioral Health Institute. Vasni has extensive training and certifications in Evidence Based Treatment Modalities, including PCIT, and works extensively with interdisciplinary teams.

Dean M. Coffey, PsyD, MS
As an Associate Professor of Clinical Pediatrics in the Division of General Pediatrics at Children›s Hospital Los Angeles (CHLA) and Keck School of Medicine of USC, Dr. Coffey has extensive experience implementing the Incredible Years® Parent Program (IY) in both clinical and community-based settings. He is an Incredible Years® Certified Agency Mentor and provides training and supervision for parent group leaders in Southern California. Dr. Coffey will serve as the Moderator for the panel presentation and discussion.

Questions Discussed:

Training - What value did an evidence-based parent management training like the Incredible Years® Parent Program add to your training experience at CHLA and to your current clinical practice?

Fidelity - Which items on the Fidelity Checklist were most helpful for you to flexibly engage parents in your group and in the practice of your discipline?

Perspective - How did implementing an Incredible Years Parent group change your view of working with parents?

Culture - How did you culturally tailored your implementation of the Incredible Years® when co-leading parent group(s) with fidelity and in the professional practice of your discipline?

Barriers - What family barriers were encountered? How were some of these barriers removed?

Looking Ahead - How can IY programs be embedded within the existing systems for long-term impact and continuous improvement?

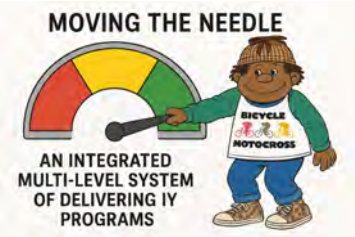
Discussion

References

American Psychological Association. (2006). Evidence-based practice in psychology: APA presidential task force on evidence-based practice. American Psychologist, 61(4), 271-285.

Kazdin, A. E. (2008). Evidence-based treatment and practice: new opportunities to bridge clinical research and practice, enhance the knowledge base, and improve patient care. American psychologist, 63(3), 146.

Webster-Stratton, C. (2015). The Incredible Years® parent programs: Methods and principles that support program fidelity. In Evidence-based Parenting Education (pp. 169-186). Routledge.



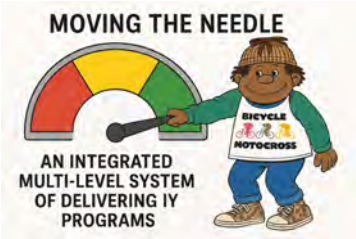
2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

AGENDA

FRIDAY, September 19th

Time	Activity/Team	Location
8:00-8:30am	Mentors arrive to CHLA - coffee	Conference Room #623
8:30-10:00am	Micah Orliss & Panel: Wally and Friends: Unique Applications of Puppets in the Delivery of IY Parent, Teacher and Child Programs	Conference Room #623
10:00-10:15am	Break	
10:15-11:00am	Marie-Josée Letarte: Improving Parenting Practices to improve School Readiness in at Risk Children in Quebec (via Zoom)	Conference Room #623
11:15-12:00	Lee Taylor-Burt & Sheila Russell: Fidelity Days for TCM & IB Delivery in New Zealand	Conference Room #623
noon-1:00pm	Lunch together at CHLA	
1:00-3:00pm	Carolyn Webster-Stratton: Preschool Basic 2.0 Program 4	Conference Room #623
3:00-3:15pm	Break	
3:15-4:15pm	Small Group Break-Out & Video Review Groups	Smaller Rooms
Needles Thread Tape Measure	Parent/Teacher — Silvia Video/ Dean Coach Parent/Teacher — Kathleen Video/ Nina Coach Teacher/Child — Catherine Video/ Micah Coach	
4:15-4:30pm	Small Groups review take-home message to present at 4:30pm	
4:30-5:00pm	Return to Conference Room for small group gems and wrap-up	Conference Room #623
6:30-11:30pm	Celebration Dinner: Dean Coffey & Steve Moss, 3195 Verdugo Pl, Los Angeles, CA 90065	Dr. Dean Coffey's house

The Incredible Years®



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

Panel Discussion

Wally and Friends: Unique Applications of Puppets in the Delivery of IY Parent, Teacher and Child Programs

Presenters

Micah Orliss, PhD
Micah Orliss is a licensed psychologist at Children's Hospital Los Angeles and an Assistant Professor of Clinical Pediatrics at the University of Southern California (USC) Keck School of Medicine. Micah is a faculty member of the Project HEAL program, where he works with children and families exposed to trauma. He specializes in working with infants and children in foster care. He also supervises interns and postdoctoral fellows in CHLA's APA Accredited pre-doctoral psychology internship and postdoctoral psychology fellowship. As part of his clinical work, Micah has been conducting Dina Small Groups for over ten years and has been a Certified Small Group Dina Leader since 2013 and a Certified Small Group Dina Mentor since 2017. Micah is also trained in the Preschool BASIC Parent Groups, Advanced program, and Attentive Parenting program.

Jessica Y. Gonzalez, MS, CCC-SLP
Jessica Gonzalez is a dedicated Speech Language Pathologist (SLP) with expertise in evaluation, assessment, and treatment planning across a range of pediatric functional needs relating to communicative and developmental disorders. She has served as an SLP for over ten years at CHLA working with children and adolescents through the USC University Center for Excellence in Developmental Disabilities (USC UCEDD). Her professional interests include bilingualism, augmentative and alternative communication, and parent training programs. Jessica received a bachelor's degree in Communication Studies with a double major in Spanish from Loyola Marymount University, and a master's degree in Communicative Disorders from the University of Redlands.

Jenna Kobara, OTD, OTR/L, SWC
Jenna Kobara is currently an Assistant Professor of Clinical Occupational Therapy at the USC University Center of Excellence in Developmental Disabilities (UCEDD) based at Children's Hospital Los Angeles. She received her Masters of Arts degree in Occupational Therapy from the University of Southern California (USC), and completed the Doctoral Program at USC. The focus for her project was about encouraging inter-professional collaboration between Ghanaian Community Based Rehabilitation and Ghanaian Occupational Therapy.

Welcome New IY Clinical Director Emily Haranin, PhD

Dear Incredible Years Mentors and Trainers,

I am delighted to tell you that we have hired Emily Haranin, PhD, as Clinical Director of Incredible Years Inc. I am "over the moon" with her accepting this position effective as of September 3rd.

Emily is a certified mentor in the IY Basic Parent program and has worked delivering IY parent programs in English and Spanish at Children's Hospital Los Angeles (CHLA) for 14 years. In addition to running many IY parent groups each year she has given numerous presentations and workshops at local, regional and national professional meetings. Clearly training others has been her ongoing passion. I have co-trained with her and seen many videos of her group delivery. She is collaborative, supportive and incredibly competent and committed to delivery of evidence-based programs with fidelity.

Emily earned her doctorate in School Psychology from the University of South Carolina and then spent two years in Puebla Mexico working with an NGO focused on providing trauma informed services to children and families impacted by violence. In 2010, she moved to Los Angeles to complete her postdoctoral fellowship at CHLA and was then hired as a staff psychologist. In 2015, she joined the Keck School of Medicine of USC as a Clinical Assistant Professor with a focus on clinical and educational efforts. In 2020 she began her role as training director fo the federally funded California Leadership in Education in Neurodevelopmental and Related Disabilities and guided significant curriculum renovations from in-person, to fully online, to the current hybrid training model.

In addition, her approach to patient care as a child and adolescent psychologist is deeply rooted in her doctoral training as a school psychologist. Her focus was on children with developmental conditions such as ADHD, Autism and dually diagnosed psychiatric disorders. She provided direct services, including assessments, consultation and intervention.

During her time at CHLA, Emily has been involved in many clinical, teaching and mentoring roles with psychology trainees as well as trainees from a variety of other healthcare disciplines. She has directly supervised over 30 pre- and post-doctoral psychology trainees and provided group supervision to over 15 fellow and intern cohorts. Her experiences show her commitment to education and leadership within the area of interdisciplinary clinical training and collaboration with diverse groups.

Emily's role with Incredible Years will involve training others in IY parent programs as well as providing consultations and support to clinicians and agencies, overseeing the certification process and promoting fidelity IY program delivery. She will enhance support provided to IY group leaders, coaches, mentors and trainers so that a diverse and well-functioning worldwide IY team can thrive.

I look forward to working with her to expand her training options in IY on-line and in-person delivery methods to multiple interdisciplinary groups.

Personally, I am honored to have Emily as part of our IY Team and know she will take us forward to developing new connections and expanding opportunities with new populations.

Best wishes,

Carolyn Webster-Stratton, MSN, MPH, PhD
Developer of Incredible Years Programs

Welcome New Mentors, Peer Coaches & Mentors-in-Training 2025

Carina Vecchi - USA

Carina Vecchi, PsyD, is a licensed clinical psychologist at the Behavioral Health Institute at Children's Hospital Los Angeles, where she provides diagnostic evaluations and evidence-based behavioral interventions for school-age children and their families. Originally from Argentina, she is a bilingual clinician dedicated to culturally responsive care and support for Latinx/Hispanic families. Carina is an accredited IY Basic Parent Group Leader, co-facilitating IY as well as other parenting programs. She also provides clinical supervision for pre-doctoral interns and postdoctoral fellows.

Catherine Millard - USA

Catherine Millard is a Program Consultant at Invest in Kids (IIK), a non-profit organization in Denver, CO, where she trains and coaches teachers in TCM and Dinosaur School and supports Colorado communities with implementation of the Incredible Years programs. Before joining the IIK team in 2004, Catherine worked as a kindergarten teacher in the Denver Public School system, where she was able to see, first hand, how important it is to have a strong social-emotional curriculum implemented in early childhood classrooms. Cathrine completed Classroom Dina mentorship in March 2022.

Heather Hall - USA

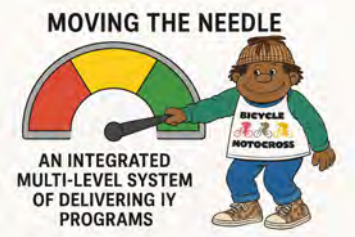
Dr. Heather Hall is a Psychologist II with the Child and Family program of Children's Hospital Los Angeles Behavioral Health Institute. Dr. Hall provides therapy for children and families individually and in group formats, specializing in treating children with autism and other developmental disabilities. She is involved in the training programs within the Community Behavioral Health program, providing supervision to both pre-doctoral interns and post-doctoral fellows. Dr. Hall is an accredited IY Small Group Dina Child group leader who has been leading Dinosaur School over the past 15 years, with the guidance and mentorship of Drs. Orliss, Coffey, Haranin and Gutierrez.

Indrė Steponavičiūtė-Kupčinskė - Lithuania

Indrė holds a Master's degree in Educational Psychology, with experience working with parents, teachers, and young children, and currently works as a psychologist at a school-kindergarten. In addition, Indrė conducts workshops for specialists and contributes to the development of materials that address key issues in schools, such as adolescent loneliness, gifted education, and emotional well-being, by creating content, performing thematic analysis, and developing practical recommendations for educators. She is an accredited Incredible Years parent group leader, with experience leading IY preschool and school age groups both online and in-person, and began peer coaching in 2024.

Päivi Lindberg - Finland

Päivi holds a Masters degree in social services, and works as a project coordinator for Incredible Years implementation in Finland. In this role, she promotes quality implementation and research on Incredible Years practice in Finland. Päivi has over 15 years of experience as a family worker. Päivi has been trained in the Basic parenting program and in Parent Home Coaching, and as an IY parent peer coach. Päivi was awarded Peer Coaching accreditation in 2025.



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

New Mentor-in-Training 2025

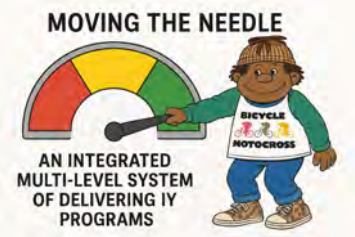
Cassandra Borlase - New Zealand
Cassandra is the Driector of both Tulsi Parenting Hub and Koru Parenting Hub in New Zealand, where she and her team deliver and expand access to vital evidence-based parenting strategies. Cassandra has over 12 years of experience delivering IY parenting groups as an accredited facilitator and peer coach. She is passionate about equipping parents with the skills and confidence to build strong, positive relationships with their children. Cassandra holds a Bachelor of Natural Medicine and Herbal Medicine, and has practiced as a children's naturopath.

NEW MENTOR ACCREDITATIONS! 2025

Lucy Gregory (New Zealand) Autism Parent & Basic Parent

PEER COACH ACCREDITATION
Annemarie O'Murchu, Ireland - Basic Parent
Jayne Snare, Wales - Autism Parent

GROUP LEADER ACCREDITATION
Sandra Pickering, NZ - Teacher Autism



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

MENTOR ACCREDITATIONS 2024

Kärt Kase
(Estonia)
Basic Parent

Lee Taylor-Burt
(New Zealand)
Incredible Beginnings

Sheila Russell
(New Zealand)
Incredible Beginnings

Morten Haaland
(Norway)
Classroom Dina

Nina Simola
(Finland)
Basic Parent

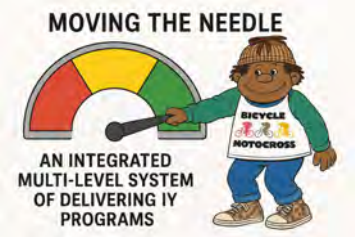
Stephanie Shepard Umashi
(Rhode Island)
Incredible Beginnings

PEER COACH ACCREDITATION

Rhian Carter, Wales- Basic Parent
Karen Legge, England - Basic Parent

GROUP LEADER ACCREDITATION

Rhian Carter, Wales - Incredible Beginnings
Lisa Christensen, NZ - Teacher Autism

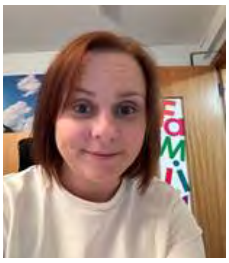


2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

New Mentors & Mentors-in-Training 2024

Annemarie Ó Murchú - Ireland

Annemarie works as a facilitator and development officer for Archways in Ireland. She first trained as an IY Basic Parent group leader in 2011, and has delivered over 20 parent groups with over 200 families. Annemarie has also trained in the IY Autism Parent program, the Baby Parent program, the Small Group Dina Child program, and the Incredible Beginnings and Teacher Classroom Management programs. Annemarie received Basic Parent accreditation in 2017, and completed Parent peer coach accreditation in 2025 - congratulations!



Catherine Corbett - Scotland

Catherine is the manager of the Shetland Family Centre, on the island of Shetland, the most northerly point of the UK. She has helped develop a thriving IY outreach within Shetland. Catherine began with Incredible Years in 2012, attending a group in Edinburgh as a parent. Next, in 2013, she attended Basic Parent group leader training and started delivering the program with parents. She is now an accredited parent group leader, and has been peer coaching over the last 3 years.

Jayne Snare - Wales

Jayne works as a Highly Specialist Social Competence and Parenting Practitioner for Powys Teaching Health Board in Wales. Jayne holds degrees in Learning Disability Nursing, a Masters in Applied Behavior Analysis, and is a Board-Certified Behavior Analyst. Jayne has trained in the IY Basic Parent program, the Autism Parenting program, the Baby Parenting program, the Incredible Beginnings program, and the Classroom Dina program, and is an accredited group leader and accredited peer coach in the IY Autism Parenting program.

Kärt Kase

Kärt is a family psychotherapist working at her private practice in Tallinn, Estonia. Kärt has written three books on relationship issues. She is also a PAX Good Behavior Game mentor and trainer for Elementary School teachers. She is a certified group leader, peer coach, and mentor-in-training in the IY parent program. She is actively running groups and doing peer coaching. Kärt was awarded Parent Mentor accreditation in October 2023 - congratulations!

New Mentors & Mentors-in-Training 2024

Karen Legge - England

Karen trained as a Social Worker in 2004. She originally trained in the IY Basic Parent program in 2010. In 2020 she took the role of tutor and supervisor on the parenting and 0-5 strands of the CYP-IAPT programme at Exeter University, working to embed Incredible Years into their work. Karen has over 15 years' experience working directly with families for Bristol City Council and the voluntary sector, delivering a variety of parenting programs including the IY Preschool Basic program, offering group based and home coaching interventions. Karen became an accredited group leader in 2021, a Peer Coach in 2024 and is now a Mentor-in-training in the parent program.

Nina Simola

Nina is a social services counselor and training specialist for the University of Turku, Finland. Nina has over 15 years of experience working with families and children, including children who have neurospsychiatric and behavioral disorders. Nina has delivered the IY Basic Parent program in both the group-based and home-based model. She is an accredited parent group leader and peer coach, and was awarded Parent Mentor accreditation in September 2024 - congratulations!

Paula Milanesi - Scotland

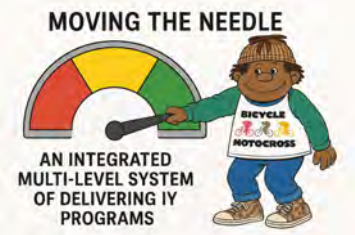
Paula holds a Masters Degree in Applied Child Psychology and works as a Clinical Associate in Applied Psychology at NHS Fife in Scotland. She has had the opportunity to work alongside Brenda Renz at the Psychology of Parenting Project at NHS Education for Scotland. In addition to having trained in the IY Basic Parent program, Paula has also trained in the Small Group Dina Child program and Autism Parenting program. Paula was accredited as a Basic Parent Group Leader in 2013, and as a parent peer coach in 2019, and is now a mentor-in-training in the IY Parent program.

Rhian Carter - Wales

Rhian works for the Powys County Council as a Parenting and Children's Social Competence Officer. Rhian began with Incredible Years in the classroom in 2009, and has continued to deliver Dinosaur School. She has been trained and has delivered IY Baby, Toddler, Preschool, and School Age and School Readiness parenting classes, and the Incredible Beginnings program for teachers. Rhian received Basic Parent accreditation in 2017 and parent peer coach accreditaton in 2024. Rhian is also accreditated in the Incredible Beginnings program.

Silvia Gutierrez - USA

Dr. Silvia Gutierrez is a Clinical Psychologist at Children's Hospital Los Angeles, where she provides direct client care to school age children and supervises pre-doctoral interns and postdoctoral fellows. She is a Spanish-speaking native from Mexico, migrating to the USA at the age of 15. She holds Board Certification in Child and Adolescent Psychology (ABPP). She has been working at CHLA for 17 years and, has been conducting IY groups in Spanish and English for 15 years. Dr. Gutierrez is a certified IY parent peer coach and is currently leading an IY coaching group comprised of CHLA staff and predoctoral interns.



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

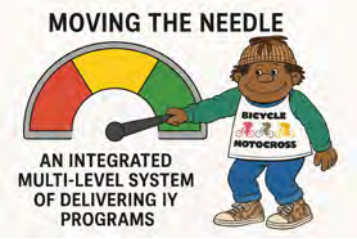
COACH AND PRESENTER ROLES

AS THE **PRESENTER**, YOU WILL BE RESPONSIBLE TO:

- Find your slot on the agenda: note the day, time, and allotted length of time
- Prepare your video segment ahead of time - select 1 or 2 segments of video (total 10-15 min) of your group session or workshop delivery for participant feedback and bring the video with you!
- Identify the goals for your presentation.
- Determine when you have had enough feedback.
- Reflect on your strengths and what you have learned from the discussion and future goals.

AS THE **COACH**, YOU WILL BE RESPONSIBLE TO:

- Keep track of the time agenda for your presenter's session.
- Assure the presenter is in a safe environment and the feedback from participants is productive.
- Assist the presenter in making sure his or her goals are addressed.
- Allow everyone to participate with ideas and questions.
- Help scaffold the process of reflecting on the presenter's group leader process and methods demonstrated.
- Set up practice exercises as needed.
- Summarize what was learned from the discussion.



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

SMALL GROUP BREAKOUT DISCUSSION KEY PIECES IN IY PROGRAM DELIVERY

Each day in the afternoon break-out sessions, mentors will share videos of their work for feedback. After each video presentation we could like you to summarize 1-2 key puzzle pieces that are important for group leaders, coaches or mentors to highlight for consultation, peer coaching and/or accreditation. Write these on your puzzle cards and assign someone to present these at the end of the day at 4 pm to the entire group.

Here are some concepts or program components to think about when reviewing a video clip. Depending on the video clip shown choose 1-2 of these concepts to explore in some detail. Summarize your key insights.

What are the key pieces that need to be incorporated into the IY program puzzle?

- Review of home or classroom activities?
- Benefits/Barriers
- Mediating introductory narrations?
- Mediating video vignettes?
- Setting Up role play practices?
- Incorporating individual participant goals with new learning?
- Pulling out "principles" and promoting self-reflection?
- Behavior planning
- Responding to resistance
- Motivating parents and/or teachers
- Tailoring to family or teacher context, culture, and to child developmental and language status
- Coleader relationship
- Connecting and integrating thought processes, emotions and behaviors

Incredible Years
Coaching and Mentoring Gems

Date _____ Group Leader(s) _____ Coach/Mentor _____

Program: Parent ☐ Teacher ☐ Child ☐ Video viewed? ☐ Topic _____ Date for next meeting _____

Fidelity Issues Discussed:

- ☐ Attendance
- ☐ Participant evaluations
- ☐ Home activities engagement
- ☐ Principles
- ☐ Mediating vignettes & Number
- ☐ Role play/practices/ buzzes & Number
- ☐ Participant goals
- ☐ Tailoring to needs
- ☐ Weekly calls
- ☐ Session checklists
- ☐ Peer & self-evaluation forms
- ☐ Group process checklists
- ☐ Self-reflection inventories
- ☐ Accreditation/ Certification
- ☐ Coaching evaluation

Group leader prior goals reviewed:

Group leader goals for group DVD review:

Issue problem solved and practiced:

Summary of Key Learning:

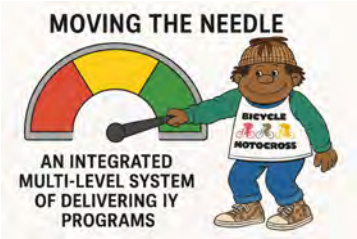
The Incredible Years

www.incredibleyears.com

New Goals and Plans:

Coach/Mentor Actions:

Additional Notes:

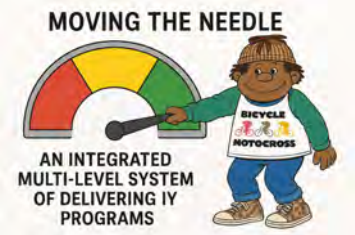


2025 Incredible Years®
21st Mentor Meeting
Moving the Needle

NEW MATERIALS
Preschool Basic 2.0

Preschool Basic 2.0 Curriculum Kit includes

- New Leaders Manuals (set of 3)
- New Video Vignettes in Online Streaming Subscription format
- New Parent Pyramid Poster
- New Arc of Emotion Regulation Poster
- Tool Kit Posters (set of 3)
- Calm Down Thermometer Poster
- Wally Detective Books (set of 4)
- Incredible Years Trouble-Shooting Book
- Collaborating with Parents Book
- Kids and Parents Conversation Cards
- Piggy Bank Magnet



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

NEW MATERIALS

Third Edition *Incredible Years* Book - Lithuanian

Third Edition *Incredible Years* Book - Spanish

Book *Helping Preschool Children with Autism: Teachers and Parents as Partners*

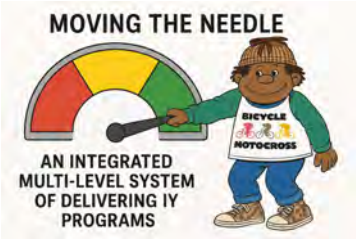
Autism Parenting -AND- Helping Preschool Children with Autism Program Flash Drives (English and Spanish)

Teacher Classroom Management Program Flash Drive

Incredible Beginnings Program Flash Drive

Program video streaming (English & Spanish) for:

Baby Parenting Program, Toddler Parenting Program, Preschool Basic, School Age Basic, Advance Parenting Program, Attentive Parenting Program, Autism Parenting Program. Classroom/Small Group Dina. Incredible Beginnings, Teacher Classroom Management, and Teacher Autism Programs



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

NEW MATERIALS

Presentations by Carolyn Webster-Stratton:

- Basic Evidence-Based Parenting Program Version 2.0
  https://youtu.be/9eIVAGciA7E?si=JUILWFh_2cvYAa0c
- Scaling Up Incredible Years Programs With Fidelity
  https://youtu.be/5_3o7gUbX6M?si=iG774ndS3n1ND40-
- 40 Incredible Years: Multicultural Collaboration Deliver IY Programs Promote Children's Well Being
  https://www.youtube.com/watch?v=_MY_8bzhuiM&t=21s
- Adaptations for Children with Autism Spectrum Disorder ASD Incredible Years Programs
  https://www.youtube.com/watch?v=L-RtlDo4AcE&t=3s

Articles and Handouts by Carolyn Webster-Stratton:

- Article by Carolyn Webster-Stratton: Piscitello, J. & Webster-Stratton, C. (2025, in press) The Incredible Years Parent Program: Four Decades of Evidence-Based Parenting Support. Research and Delivery. In T. Del Vecchio, and M.D. Terjesen, *Handbook of Behavioral Parent Training*, American Psychological Association.
  https://www.incredibleyears.com/research/library/the-iy-parent-programs-four-decades-of-evidence
- Article by Carolyn Webster-Stratton: *Affirming Diversity and Achieving Cultural Sensitivity While Maintaining Program Fidelity When Delivering the Incredible Years® Programs*
  https://www.incredibleyears.com/research/library/article/affirming-diversity-and-achieving-cultural-sensitivity-while-maintaining-program-fidelity-when-delivering-the-incredible-years-programs
- Article by Carolyn Webster-Stratton on anxiety: *How Parents Can Build Emotional Resilience in Young Children (3-8 years) Who are Anxious: The Do's and Don'ts*
  https://www.incredibleyears.com/resources/groupleaders?name__icontains=anxious
- Hot Tips for Delivering IY Groups On-Line - revised March 2025
  https://www.incredibleyears.com/resources/groupleaders?name__icontains=on-line&filter_a__in=16
- Hot Tips for Managing Thoughts, Feelings & Parenting Behaviors: Exploring Parent Depression & Anger and Promoting Coping Cycles
  https://www.incredibleyears.com/resources/groupleaders?name__icontains=coping&filter_a__in=16

- Baby Sleep Regression - Points to Remember
  https://www.incredibleyears.com/resources/groupleaders?name__icontains=sleep
- Autism Parent Program Handouts - Spanish
  https://www.incredibleyears.com/resources/facilitators?name__icontains=autism+program+handouts+%28Spanish%29
- Hot Tips for IY Autism Programs:
  - Communication Translation Using Sounds & Gestures
  - Using The How I Am Incredible Template
  - ABCs Of Child Learning & Behavior Training
  - Tailoring Role Play To Child Developmental Level
  - How Use The Spotlight Poster
  - Using Visuals To Enhance Childrens Understanding Of Language

  https://www.incredibleyears.com/resources/facilitators?name__icontains=hot+tips+for+IY+autism
- ***How I Am Incredible!*** handout for Parenting Programs, Autism Programs, Teacher Programs
  https://www.incredibleyears.com/resources/facilitators?name__icontains=how+i+am+incredible
- Reading with Extra CARE for Young Children on the Autism Spectrum
  https://www.incredibleyears.com/resources/facilitators?name__icontains=extra-care
- Parent Self-Reflection Inventories - Weekly Tools Used (editable)
  - Weekly Tools Used to Build Positive Relationships
  - Weekly Tools Used to Stay Calm and Get Support
  - Weekly Tools Used to Manage Misbehavior

  https://www.incredibleyears.com/resources/facilitators?name__icontains=weekly+tools+used
- Helping Preschool Children with Autism: Teachers and Parents as Coaches - Editable Coaching Checklists
  - Descriptive Commenting Coaching Editable Checklist
  - Pre-Academic Coaching Editable Checklist
  - Social Skills Coaching Editable Checklist
  - Emotion Coaching Editable Checklist

  https://www.incredibleyears.com/resources/facilitators?name__icontains=coaching+editable
- Incredible Beginnings Program Behavior Plans
  https://www.incredibleyears.com/resources/facilitators?name__icontains=behavior+plans&filter_c__in=16
- Incredible Beginnings Program Teacher-to-Parent Communication Letters
  https://www.incredibleyears.com/resources/facilitators?name__icontains=communication+letters&filter_c__in=16

- TCM Program Handouts (updated 2022)

  https://www.incredibleyears.com/resources/facilitators?name__icontains=TCM+Handouts&filter_c__in=15

- TCM Program Handouts - Spanish

  https://www.incredibleyears.com/resources/facilitators?name__icontains=spanish&filter_c__in=15

Fidelity Forms

- Peer Coaching Process Checklist - revised 2022

  https://www.incredibleyears.com/resources/peercoaches?name__icontains=2022

- Protocol for 3-day Training - Classroom Dina - revised February 2022

  https://www.incredibleyears.com/resources/facilitators?name__icontains=classroom+Dina+workshop+Training&filter_b__in=3

- Protocol for 3-day Small Group Dina Training - revised March 2022

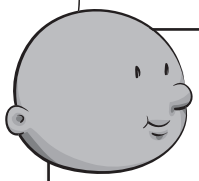
  https://www.incredibleyears.com/resources/facilitators?name__icontains=small+group+dina+workshop+training&filter_b__in=3

- Protocol for 3-day TCM training - revised April 2022

  https://www.incredibleyears.com/resources/facilitators?name__icontains=teacher+classroom+management+workshop&filter_b__in=3

- Online consultation call prep form
  - Online Consultation Tips for Mentors via Zoom
  - Online Consultation Tips for Group Leaders
  - Online Consultation Call Prep Form

  https://www.incredibleyears.com/resources/facilitators?name__icontains=online+consultation



POINTS TO REMEMBER about Sleep Regression

What is Sleep Regression?

- Sleep regression occurs when a baby, who previously slept well, begins waking up more frequently at night or experiences shorter naps.
- It's a normal phase in a baby's development, often linked to growth, developmental milestones, or external changes.

Common Causes:

- **Growth Spurts:** Babies may become more hungry, which can disrupt sleep.
- **Teething:** Pain from teething can disturb sleep.
- **Developmental Milestones:** New skills (rolling over, crawling, talking) can make babies more restless.
- **Routine Changes:** Starting daycare or traveling to a new place can affect sleep patterns.
- **Illness or Health Issues:** Conditions like a cold, ear infection, reflux, or eczema can make babies uncomfortable and disrupt their sleep.

Signs of Sleep Regression:

- Shorter naps
- Crankiness or fussiness
- Difficulty settling down
- Frequent night wakings

Age-Related Sleep Regression:

- **4 Months:** Major milestone, becoming more aware of surroundings, developing sleep associations.
- **6 Months:** Physical developments (rolling, sitting) and social milestones (separation anxiety) can disrupt sleep.
- **8-10 Months:** Babies may practice crawling, talking, and experience more separation anxiety.
- **12 Months:** Physical skills like walking, along with night fears and changing nap schedules, can affect sleep.

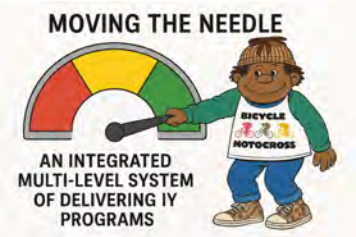
When to Seek Medical Advice:

- Reduced appetite, fewer wet diapers, or lack of weight gain.
- Signs of illness, like a fever, earache, or rash.

Tips for Dealing with Sleep Regression:

1. **Consistency:** Establish and stick to a bedtime routine to help babies self-soothe.
2. **Ensure Enough Sleep:** Babies need 12-17 hours of sleep, including both daytime naps and nighttime rest.
3. **Self-Soothe:** Allow your baby to calm down on their own, using a gentle touch if needed.
4. **Avoid Overfeeding:** Try not to feed your baby every time they wake up.
5. **Calm Environment:** Keep the room dim and quiet, minimizing interaction.
6. **Practice Separation:** Play peek-a-boo and similar games to reduce separation anxiety.
7. **Self-Talk:** Remind yourself that this phase will pass.

Sleep regression can be tough, but it's temporary and often signals positive growth.



2025 Incredible Years® 21st Mentor Meeting **Moving the Needle**

PUBLICATIONS (2021-2025)

Arruabarrena, I., Rivas, G. R., Cañas, M., and Paúl, J. D. (2022). The Incredible Years Parenting and Child Treatment Programs: A Randomized Controlled Trial in a Child Welfare Setting in Spain. *Psychosocial Intervention, 31*(1), 43–58. https://doi.org/10.5093/pi2022a2

https://www.incredibleyears.com/research/library/article/the-incredible-years-parenting-and-child-treatment-programs-a-randomized-controlled-trial-in-a-child-welfare-setting-in-spain

Constantino, J.N., Buchanan, G., Tandon, M., Bader, C., Jonson-Reid, M. (2023). Reducing Abuse and Neglect Recurrence Among Young Foster Children Reunified With Their Families. *Pediatrics; 152*(3). doi: 10.1542/peds.2022-060118.

https://www.incredibleyears.com/research/library/article/reducing-abuse-and-neglect-recurrence-among-young-foster-children-reunified-with-their-families

Crealey, G.E., Gráinne Hickey, G., & McGilloway, S. (2024). A cost-effectiveness analysis of a universal, preventative-focused, parent and infant programme. *BMC Health Services Research 24*:176.https://doi.org/10.1186/s12913-023-10492-w

https://www.incredibleyears.com/research/library/article/a-cost-effectiveness-analysis

Davey, N., & Egan, M. (2021). Sustained CPD as an effective approach in the delivery of the Incredible Years Teacher Classroom Management programme. *Educational Psychology in Practice, 37*(2), 169-186. DOI: 10.1080/02667363.2021.1886910

https://www.incredibleyears.com/research/library/article/sustained-cpd-as-an-effective-approach-in-the-delivery-of-the-incredible-years-teacher-classroom-management-programme

Dincer, C., Akgun, E., Deniz, K. Z., & Webster Stratton, C. (2025). Impact of the Incredible Years® program on Turkish preschool teachers and children. Journal of Early Childhood Teacher Education, 1–15. https://doi.org/10.1080/10901027.2025.2493178

https://www.incredibleyears.com/research/library/article/impact-of-the-incredible-years-turkish-preschool

Gaspar, M.F., Patras, J., Hutchings, J.. Homem, T., Azevedo, A.F., Pimentel, M., Baptista, E., Major, S., Vale, V., Sebra-Santos, M. (2022). Effects of a Teacher Classroom Management program on preschool teachers' practices and psychological factors: A randomized trial with teachers of children from economically disadvantaged families. *Early Education and Development 34*(3), 626-647. https://doi.org/10.1080/10409289.2022.2063612

https://www.incredibleyears.com/research/library/article/effects-of-a-teacher-classroom-management-program-on-preschool-teachers-practices-and-psychological-factors-a-randomized-trial-with-teachers-of-childr

Gaspar, M.F., Seabra-Santos, M., Relvão, J., Pimentel, M., Homem, T., Azevedo, A., & Moura-Ramos, M. (2024). Implementation in the "real world" of an evidence-based social and emotional learning program for teachers: Effects on children social, emotional, behavioral and problem solving skills. *Frontiers in Psychology, 14*. doi.org/10.3389/fpsyg.2023.1198074

https://www.incredibleyears.com/research/library/article/implementation-in-the-real-world-of-an-evidence-based-social-and-emotional-learning-program-for-teachers

Groenman, A.P., et al. (2022). An Individual Participant Data Meta-analysis: Behavioral Treatments for Children and Adolescents With Attention-Deficit/Hyperactivity Disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 61*(2), 144-158,. https://doi.org/10.1016/j.jaac.2021.02.024

https://www.incredibleyears.com/research/library/article/an-individual-participant-data-meta-analysis-behavioral-treatments-for-children-and-adolescents-with-attention-deficit-hyperactivity-disorder

Huijzer-Engbrenghof, M., Van Rijn-Van Gelderen, L., Van Den Akker, A., Jorgensen, T. D., & Overbeek, G. (2023). Intervention-induced temperament changes in children: Evidence from a randomized controlled trial of the Incredible Years parent program. Developmental Psychology, 59(10), 1839–1851. https://doi.org/10.1037/dev0001591

https://www.incredibleyears.com/research/library/article/intervention-induced-temperament-changes

Karjalainen, P., Santalahti, P., Aronen, E.T., Kiviruusu, O. (2021). Parent- and teacher-reported long-term effects of parent training on child conduct problems in families with child protection and other support services: a randomized controlled trial. *Child and Adolescent Psychiatry and Mental Health, 15*(7), 2021. https://doi.org/10.1186/s13034-021-00358-6

https://www.incredibleyears.com/research/library/article/parent-and-teacher-reported-long-term-effects-of-parent-training-on-child-conduct-problems-in-families-with-child-protection-and-other-support-service

Kennedy, Y., Flynn, N., O'Brien, E., & Greene, G. (2021). Exploring the impact of Incredible Years Teacher Classroom Management training on teacher psychological outcomes. *Educational Psychology in Practice, 37*(2), 150-168. DOI: 10.1080/02667363.2021.1882944

https://www.incredibleyears.com/research/library/article/exploring-the-impact-of-incredible-years-teacher-classroom-management-training-on-teacher-psychological-outcomes

Leitão, S.M., Francisco, R., Gaspar, M.F. et al. (2023). The person within: Parents and professionals' views about the practitioner's role in a parenting program. *Journal of Child and Family Studies 32*, 1452–1469. https://doi.org/10.1007/s10826-023-02553-9

https://www.incredibleyears.com/research/library/article/the-person-within-parents-and-professionals-views-about-the-practitioners-role-in-a-parenting-program

Leitão, S.M., Pereira, M., Santos, R.V., Gaspar, M.F., Seabra-Santos, M.J. (2022). Do Parents Perceive Practitioners to Have a Specific Role in Change? A Longitudinal Study Following Participation in an Evidence-Based Program. *International Journal of Environmental Research and Public Health, 19*, 9100. https://doi.org/10.3390/ijerph19159100

https://www.incredibleyears.com/research/library/article/do-parents-perceive-practitioners-to-have-a-specific-role-in-change-a-longitudinal-study-following-participation-in-an-evidence-based-program

Mansoor, E., Gonzalez, M., Acosta, J., Xue, L., Peskin, A., Rothenberg, W. A., Bandstra, E. S., Garcia, D., Jent, J. F., & Natale, R. (2025). Breaking barriers: Enhancing access and outcomes in a community-based parenting intervention for at-risk families. Journal of Family Psychology. Advance online publication. https://doi.org/10.1037/fam0001370

https://www.incredibleyears.com/research/library/breaking-barriers-enhancing-access

McLean, R. K., Roach, A., Tully, L., & Dadds, M. R. (2023). Toward evidence-informed child rearing: Measurement of time-out implementation in a community sample. *Clinical Child Psychology and Psychiatry, 28*(2), 417-433. DOI: 10.1177/13591045221076644

https://www.incredibleyears.com/research/library/article/toward-evidence-informed-child-rearing-measurement-of-time-out-implementation-in-a-community-sample

Murray, D.W., Kuhn, L.J., Willoughby, M.T., LaForett, D.R., & Cavanaugh, A.M. (2021). Outcomes of a Small Group Program for Early Elementary Students with Self-Regulation Difficulties: Limitations of Transportability from Clinic to School. *School Mental Health, 1*(1), 26–36.. DOI: https://doi.org/10.1007/s12310-021-09480-4

https://www.incredibleyears.com/research/library/article/outcomes-of-a-small-group-program-for-early-elementary-students-with-self-regulation-difficulties-limitations-of-transportability-from-clinic-to-schoo

Piscitello, J. & Webster-Stratton, C. (2025, in press) The Incredible Years Parent Program: Four Decades of Evidence-Based Parenting Support. Research and Delivery. In T. Del Vecchio, and M.D. Terjesen, *Handbook of Behavioral Parent Training*, American Psychological Association.

https://www.incredibleyears.com/research/library/the-iy-parent-programs-four-decades-of-evidence

Roach, A. C., Lechowicz, M., Yiu, Y., Diaz, A. M., Hawes, D., & Dadds, M. R. (2022). Using time-out for child conduct problems in the context of trauma and adversity: a nonrandomized controlled trial. *JAMA, 5*(9), e2229726-e2229726.

https://www.incredibleyears.com/research/library/article/using-time-out-for-child-conduct-problems-in-the-context-of-trauma-andadversity-a-nonrandomized-controlled-trial

Samimy, S.M., Schettini, E., Fernhoff, K., Webster-Stratton, C., Beauchaine, T.P. (2022). Parent Training for Childhood Conduct Problems. In: Asmundson, G.J.G. (Ed.), Comprehensive Clinical Psychology, 2nd edition, vol. 5. Elsevier, pp. 126–147. https://dx.doi.org/10.1016/B978-0-12-818697-8.00047-9

https://www.incredibleyears.com/research/library/article/parent-training-for-child-conduct-problems-book-chapter

Seabra-Santos, M., Major, S., Patras, J., Pereira, M., Pimentel, M., Baptista, E., Cruz, F., Santos, M., Homem, T., Azevedo, A.F., & Gaspar, M.F. (2021). Transition to Primary School of Children in Economic Disadvantage: Does a Preschool Teacher Training Program Make a Difference? *Early Childhood Education Journal, 50,* 1071–1081. https://doi.org/10.1007/s10643-021-01240-y

https://www.incredibleyears.com/research/library/article/transition-to-primary-school-of-children-in-economic-disadvantage-does-a-preschool-teacher-training-program-make-a-difference

Vale, V. M. S. do, & Gaspar, M. F. da F. (2023). Nurturing Preschool Children's Social Skills and Reducing Behavioral Difficulties Through Teacher Practices: The Answer of the Incredible Years Classroom Management Programme. Early Education and Development, 1–18. https://doi.org/10.1080/10409289.2023.2287953

https://www.incredibleyears.com/research/library/article/nurturing-preschool-childrens-social-skills-and-reducing-behavioral-difficulties-through-teacher-practices

Villalta, L., Elias, M., Llorens, M., Vall-Roqué, H., Romero-González, M., & Valencia-Agudo, F. (2025, in-press) Implementation of the incredible years-ASLD® program in autism and preterm children with communication and/or socialization difficulties in Spain (FIRST STEPS): a feasibility study. *Children and Youth Services Review.* https://doi.org/10.1016/j.childyouth.2025.108422.

https://www.incredibleyears.com/research/library/implementation-asld-program-children-in-spain

Wahdan, M.M., Malak, M.Z., Al-Amer, R., Ayed, A., Russo, S., Berte, D.Z. (2023). Effect of incredible years autism spectrum and language delays (IY-ASD) program on stress and behavioral management skills among parents of children with autism spectrum disorder in Palestine. *Journal of Pediatric Nursing 72*. doi: 10.1016/j.pedn.2023.03.018..

https://www.incredibleyears.com/research/library/article/effect-of-incredible-years-autism-program-on-stress-palestine

Weeland, J., de Haan, A., Scott, S., Seabra-Santos, M. J., Webster-Stratton, C., McGilloway, S., Matthys, W., Gaspar, M. F., Williams, M. E., Mørch, W. T., Axberg, U., Raaijmakers, M., & Leijten, P. (2025). Exploring family profiles in explaining heterogeneity in parenting program engagement and effectiveness.Journal of Family Psychology, 39(2), 121–136. https://doi.org/10.1037/fam0001275

https://www.incredibleyears.com/research/library/article/exploring-family-profiles-in-explaining-heterogeneity-in-parenting-program-engagement-and-effectiveness

Williams, M.E., Hastings, R.P., & Hutchings, J. (2020). The Incredible Years® Autism Spectrum and Language Delays parent program: A pragmatic, feasibility randomized controlled trial. *Autism Research 13*(6), 1011-1022. doi:10.1002/aur.2265

https://www.incredibleyears.com/research/library/article/the-incredible-years-autism-spectrum-and-language-delays-parent-program-a-pragmatic-feasibility-randomized-controlled-trial

Zhou, X., Lee, R. M., & Ohm, J. (2021). Evaluating the Feasibility of the Incredible Years Attentive Parenting Program as Universal Prevention for Racially Diverse Populations. *Journal of Prevention and Health Promotion, 2*(1), 32–56. https://doi.org/10.1177/2632077020976401

https://www.incredibleyears.com/research/library/article/evaluating-the-feasibility-of-the-incredible-years-attentive-parenting-program-as-universal-prevention-for-racially-diverse-populations

2025 Incredible Years®

21st Mentor Meeting

Connecting the IY Puzzle Pieces for Parents and Teachers

NEW MATERIALS
PRESCHOOL BASIC 2.0

Content and Objectives – Preschool Basic 2.0

Hot Tips for Using the IY Group Leader Manual – Questions, Vignettes, Principles, Buzzes, Using Puppets, Tailoring Handouts, and Setting Up Practices

Certification – Preschool Basic 2.0

Handouts from Preschool Basic 2.0:

- Refrigerator Note: Making Mealtimes Enjoyable
- Refrigerator Note: Promoting Your Child's Healthy Media Diet (2-6 years)
- Refrigerator Note: Promoting Children's Healthy Lifestyle and Well-Being
- Brainstorm/Buzz: Benefits and Barriers to Promoting Healthy Eating Habits
- Brainstorm/Buzz: Benefits and Barriers to Children Having Chores
- Brainstorm/Buzz: Benefits and Barriers to Setting Limits
- Brainstorm/Buzz: Limit Setting – How Would You Respond
- Brainstorm/Buzz: How Could You Respond
- Ineffective Limit Setting Scenario: The Anger Trap
- Ineffective Limit Setting Scenario: The Avoidance Trap
- Ineffective Limit Setting Scenario: The Giving In Trap
- Brainstorm/Buzz: How Could You Respond
- Effective Limit Setting
- Discipline Hierarchies
- Calm Down Thermometer
- The Coping Cycle: Connecting Thoughts, Feelings and Behaviors
- Parent Depression and Anger Cycles
- Practice: The Coping Cycle – Connect Positive Thoughts, Feelings and Behaviors
- Calm Down Procedures 1-4

Hot Tips for Managing Thoughts, Feelings & Parenting Behaviors: Exploring Parent Depression & Anger and Promoting Coping Cycles

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)

Content	Objectives	Content	Objectives
Program One: Strengthening Children's Language, School Readiness, Emotion and Social Skills and Positive Relationships			
Part 1: Child-Directed Play Promotes Positive Relationships & Children's Confidence	• Understanding the value of parents' positive attention and appreciation for their children during child-directed play interactions. • Importance of respecting children's play ideas to build their self-esteem. • Parents modeling compliance to children's ideas during play to promote their cooperation. • Value of balancing power between parents and children's interactions. • Accepting children's temperament and developmental readiness for learning activities. • Building children's creativity, independence and confidence through child-directed play. • The "attention rule" — attending to positive child behavior and ignoring challenging behavior results in increased child social behaviors, positive relationships and child's sense of well-being. • The "ignoring" principle — not giving attention to annoying and challenging behaviors, a planned action for promoting "positive opposite" behaviors. • Learning the importance of the "modeling principle". • Building a positive relationship with children through regular, one-on-one "special time" with child-directed play.	**Part 2: Promoting Language Learning and Conversations**	• Using descriptive commenting to enhance children's language development. • Balancing descriptive commenting with a few open-ended questions. • Engaging in reflective commenting to enhance shared conversations. • Tailoring language for children with less verbal language and adding nonverbal visual language gestures and pictures. • Listening carefully to child and imitating, or mirroring the child's words and extending the length of sentence by one word. • Taking advantage of times child is open to a conversation – don't pressure a child to talk if the child doesn't want to; try to understand what the child is trying to tell you about their thoughts, feelings and discoveries without corrections. • Prompting conversations with the "serve and return" methods. • Promoting conversations about school experiences to enhance home-school connections. • Understanding the importance of promoting bilingual language learning. • Using puppets, pretend play, songs, games and stories to extend vocabulary and social communication. • Using interactive reading and coaching to build bilingual language and reading readiness.

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)

Content	Objectives	Content	Objectives
Program One: Strengthening Children's Language, School Readiness, Emotion and Social Skills and Positive Relationships			
Part 3: Persistence and Academic Coaching Promotes School Readiness	• Descriptive commenting and academic coaching promote children's language skills and school readiness skills. • Open-ended questions with positive feedback, connecting stories to life events and interactive reading approaches promote children's reading readiness. • Positive adult attention builds your child's "bank account" of self-confidence. • The "attention rule"—the principles of attending to positive behavior, remaining patient with your child's learning efforts results in increased self-esteem and children's ability to cope with frustration. • The "modeling principle"—parents avoiding the use of critical statements and demands and substituting positive polite language builds children's resilience. • Using "persistence coaching" to strengthen children's ability to be focused, calm and to persist with a difficult or frustrating activity.	**Part 4: Emotion Coaching Promotes Emotional Literacy and Empathy**	• Listening and understanding what the child is feeling, thinking and wanting. • Assessing children's emotion literacy and targeting emotion words to encourage. • Useing emotion coaching during child-directed play times to build children's emotion language and to encourage their expression of feelings. • Enhancing feelings communication with games and stories. • Sharing the message that all thoughts and feelings are okay, but some behavior responses are not. • Labeling a child's positive feelings more often than angry, or unhappy, or anxious feelings. • When labeling uncomfortable feelings, point out a possible coping strategy; that is, combine emotion coaching with persistence coaching as a way to help children manage their feelings. • Recognizing when a child is too dysregulated to talk, or listen, and needs space and privacy to calm down. • Parents modeling appropriate expression of feelings language themselves. • Using puppets to model, prompt and share feelings and to encourage empathy for another's feelings. • Importance of cuddling and soothing a child when frightened or hurt or anxious. • Staying calm as a parent to provide extra reassurance. • Using emotion coaching throughout the day (such as during mealtimes, bathtime, etc.). • Fostering empathy by helping the child understand another person's feelings.

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)

Content	Objectives		
Program One: Strengthening Children's Language, School Readiness, Emotion and Social Skills and Positive Relationships			
Part 5: Social Coaching Promotes Children's Cooperative Friendships	• Understanding how to use social coaching to build children's social skills. • Importance of modeling, prompting, coaching, and encouraging social skills such as sharing, being respectful, waiting, asking, taking turns, apologizing, forgiving and praising. • Understanding the developmental stages of children's social play interactions. • Learning how to apply social coaching principles outside of play times such as during meal times, sports and any family activities that require cooperation. • Labeling or describing parents' own social behavior so children know what the parent is modeling. • Participating in pretend play with puppets or action figures to model social skills such as offering an idea, or to help, or making a polite suggestion, praising, forgiving or waiting for a turn. • Modeling and prompting children with limited language by providing a suggestion for the appropriate social words to use. • Prompting children to notice what another child is doing or to help in some way. • Helping child to see the connection between their social behavior and how another child or person feels. • Encouraging joint social play between siblings and with peers.		

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)

Content	Objectives	Content	Objectives
Program Two: Using Praise and Incentives to Encourage Cooperative Behaviors			
Part 1: The Art of Effective Praise and Encouragement	• Using Labeled (descriptive) praise. • The "give to get" principle—for adults and children. • Attending to child's learning "process," not only end results. • Modeling self-praise. • Managing resistance to praise—the difficulties from self and others to accept praise. • Using specific encouraging statements versus nonspecific comments. • Getting and giving support through praise with others. • Promoting cooperative skills with praise. • Avoiding praising only perfection. • Understanding "differential attention" and "proximal praise." • Recognizing academic, persistence, social and self-regulation behaviors that need praise and coaching. • Building children's self-esteem, confidence, resilience, creativity and independence through praise and encouragement. • Promoting parents' positive self-talk.	**Part 2: Using Incentives to Motivate Children**	• Clearly identifying positive behaviors to encourage with positive attention. • Understanding that Incentives are a temporary measure designed to help a child with a particularly difficult behavior. • Learning that what reinforces one child will not necessarily reinforce another child. • Learning the value of spontaneous rewards and celebrations. • Understanding the difference between rewards and bribes. • Recognizing the "first/then" principle. • Shaping behaviors in the direction you want—"small steps toward goal." • Designing reward programs that are realistic and developmentally appropriate. • Understanding how to set up reward programs for problems such as dressing, compliance, sharing, eating, going to bed, toilet training, etc. • Importance of reinforcing yourself, teachers, and others. • Understanding how to respond to children who reject incentives or become oppositional. • Understanding the importance of combining praise with incentives and learning how to gradually withdraw incentives.

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)

Content	Objectives	Content	Objectives
Program Three: Proactive Discipline			
Part 1: Establishing Household Rules, Routines, and Healthy Lifestyles	• Clear and predictable household rules offer children safety and reduce misbehaviors. • Understanding the importance of predictable routines for bedtimes, morning routines & mealtimes. • Recognizing how to establish clear household rules. • Understanding how to separate from young children & the importance of loving reunions. • Designing visual charts for morning routines and daily responsibilities. • Promoting healthy eating habits and enjoyable mealtime experiences. • Understanding how to encourage dinner table manners. • Knowing how to use books and puppets to promote discussions of healthy lifestyles. • Understanding how to set up daily exercise routines. • Helping children develop healthy lifestyles in terms of eating, sleeping and exercise habits. • Respecting and promoting cultural identity with traditional routines, stories and food.	**Part 2: Effective Limit Setting**	• Reducing the number of commands/requests to only necessary commands that you are prepared to follow through on. • Remembering the Politeness Principle when making requests. • Keep filling your child's bank account with child directed play & coaching methods. • When possible use transition requests to warn children of a change in activity. • Avoiding unnecessary, vague, confusing or question commands/requests. • Commands should be clear, brief, positive and action oriented. • "When-Then", "if-then" and "first-then" commands offer the child a choice related to positive outcome. • Children need warnings, reminders and redirection. • Praise and reward child compliance to commands/requests. • Consistently ignore children's challenging responses to limits set. • Manage resistance to limit setting by staying patient and calm. • Strive for a balance of parent and child power.

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)			
Content	**Objectives**	**Content**	**Objectives**
Program Four: Preventing and Managing Misbehavior			
Part 1: Teaching Children Emotion Regulation Skills	• Continuing to use emotion coaching to strengthen emotional literacy. • Understanding the Arc of Emotional Regulation. • Strengthening children's use of emotion self-regulation skills such as positive self-talk, positive imagery, music and exercise. • Using puppets and breathing ball to practice calm down deep breathing skills with children. • Helping children practice calm down methods with the Calm Down Thermometer. • Using books and other visual images to teach and practice calm down methods. • Understanding the importance of parents using calm down methods themselves to stay patient. • Understanding the importance of regular exercise as a way for children to manage emotional regulation. • Praising and rewarding children when they remain patient and calm in frustrating situations.	**Part 2: Ignore, Distract, and Redirect**	• Parents practicing self-control and using calm down strategies themselves to stay patient. • Understanding the importance of repeated learning trials for children and that challenging behavior is a signal that the child needs some new positive learning opportunities. • Continuing to invest in your child's positive bank account with child directed play, coaching methods, encouragement, praise and incentives. • Understanding the Arc of Emotional Regulation, when to offer support, and when to give children time and space to calm down. • Understanding effective ways to use the Ignore strategy with targeted behaviors parents want to see less of. • Learning the value of motivating distractions and redirections.

Content and Objectives of the Incredible Years® Preschool Basic Parent Training Program 2.0 (Ages 3–6)

Content	Objectives	Content	Objectives
Program Four: Preventing and Managing Misbehavior			
Part 3: Consequences for Aggressive or Destructive Behavior	• Understanding the Arc of Emotional Regulation, when to offer support, and when to give children time and space to calm down. • Teaching and practicing with children how to take time away to calm down & use self-regulation and calm down skills. • Using puppets to teach children how to take Time Out to Calm Down. • Learning when a self-regulation strategy, or Ignore, or Time Out to Calm Down strategy is needed for selected behaviors. • Understanding the compliance training process for children with Oppositional Defiant Disorder. • Learning when a logical or natural consequence might be the appropriate strategy. • Parents practicing self-control and using calm down strategies themselves to stay patient.	**Part 4: Teaching Children to Problem Solve**	• Understanding how to have fun using games, books and imaginative play interactions to present hypothetical problem scenarios designed to promote discussions and opportunities for children to practice acting out solutions. • Helping children realize that an uncomfortable feeling signals a problem that needs discussion and problem solving with someone. • Using puppets to model problem solving steps and prompt practice of solutions • Understanding how to use the "attention principle" during the problem-solving play interactions • Helping young preschool children (3-6 years) focus on generating and practicing several different solutions for a problem situation. • Helping early school age children (6-8 years) think whether their solutions are safe, fair and lead to good feelings and how to make the best solution choice. • Setting up problem solving scenarios to practice that occur for their children at home or school (e.g., fears or frustrations or lonliness). • Helping children think about what to do when one solution doesn't work. • Understanding the importance of waiting until a child is regulated before trying to problem solve; avoid doing this when children are highly dysregulated. • Teaching parents how to use the Problem Solving Checklist and Worksheets to review their problem solving approaches.

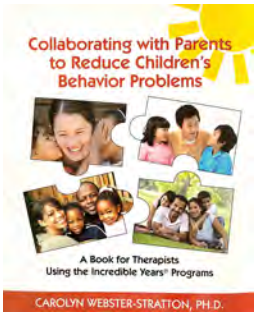
Hot Tips for Using the IY Group Leader Manual - Questions, Vignettes, Principles, Buzzes, Using Puppets, Tailoring Handouts & Setting Up Practices

Carolyn Webster-Stratton, Ph.D.

Introduction

Critics of manual-based psychotherapies or Interventions assume that manuals are rigid, inflexible, and offer little individual client or group leader variation. But just as a chef improvises and adapts recipes to create exciting, original meals, the experienced group leader will adapt a manualized intervention with sensitivity to the group's needs and goals for themselves and their children.

Although the Incredible Years® Parenting Program is a structured therapeutic program with detailed manuals, session protocols, home assignments, and handouts, its ultimate success is dependent on a skilled group leader who tailors it to the families' individual needs. **Therapeutic principles can be manualized, but individualized, culturally sensitive, and empathic intervention cannot.** A high degree of clinical sophistication is a necessary requirement for successful delivery of this intervention. Attending certified group leader training workshops, arranging ongoing supervision from IY coaches, mentors and trainers, and peer review and becoming certified/ accredited as a group leader will enhance the leader's broader understanding of the program as a whole and how to implement it in a flexible, individual, culturally sensitive and collaborative way.



A key element of this intervention is the collaborative leadership style of the group leader. This collaborative approach ensures that the parents "own" the material because the basic principles have been drawn from them by the skilled group leader. See Parts 3 and 4 of the introduction for more information about the collaborative style as well as the book *Collaborating with Parents to Reduce Children's Behavior Problems* by Carolyn Webster-Stratton, Incredible Years Press (2012).

Tip #1

Don't be too manual dependent by focusing on reading all the questions, thereby avoiding eye contact with parents when asking questions (glance down briefly). The questions are meant to be guides or suggestions to facilitate group discussion about the video vignettes and principles. In general, you can start with an open-ended question such as, *"What do you think of that father's approach?" or, "How do you think the child (or father) felt in that instance?" or, "What do you think the benefits of this approach is for achieving the goals you have for your child?"* Then listen carefully and follow the parents' lead, validate parents' insights, ask more questions to explore parents' reflections and pull out key interaction principles from their ideas.

Tip #2

One or two questions may be sufficient. It is not necessary to ask all the questions in the manual. These questions are simply examples of kinds of questions you might pursue. If the points raised in the questions have already been discussed previously then proceed with a different question or follow up on another point that may have been initiated by a parent. By digging in and exploring parents' responses to your questions you can often find a "principle" and acknowledge the parents' insights. It is important this question asking does not become a question and answer test rather a discussion and assessing its relevance to the parents' goals.

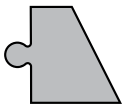
Tip #3

Each part of a program is not necessarily meant to be covered in one entire two-hour session! In general, 8-10 vignettes may be covered in a two-hour session. Pace yourself according to the parents' difficulty or familiarity with the material and the group's talkativeness. Sometimes a particular concept or topic is new to a group (e.g. persistence or self-regulation or social coaching) and it may take 2 sessions to adequately cover the material. The prevention protocol allows for 1 session per topic to complete in 14 sessions. However, it is important to allow for some flexibility in the number of sessions. For the higher risk populations or for the treatment model (diagnosed children with ODD or ADHD) or for groups where English is not their first language you will need 18-20 sessions to complete the program. See Part 5 for session checklists and protocols.

Tip #4

Carefully plan the most appropriate vignettes for each group. Those vignettes marked with an asterisk reflect vignettes that are some of the developer's favorites. However, try to study all the vignettes and choose those that best reflect the learning needs or goals, family structure, ethnic diversity and language of the parents in your group. Some vignettes are in Spanish with English subtitles and some reflect indigenous populations, new immigrant families and different ethnicities. There is much to be gained from parents viewing vignettes that reflect a variety of families from different cultural backgrounds. Parents universally around the world regardless of culture have similar goals to promote their children's well-being, school success and attachment.

Tip #5



Show most of the Principles and Reflections vignettes. The **PRINCIPLE** vignettes are key parent child management concepts we want to be sure the parents understand. Many of these principles will have been derived from the group discussions. Viewing these Principles video clips will serve to validate the ideas and principles parents came up with themselves. These Principles vignettes are always shown after parents have discussed the vignette and have had time to come up with their own ideas or rationale for their use.

The **Parent Reflections** are shown so that parents can see how the parents shown in the vignettes have used the IY principles to achieve their individual goals. These are often very motivating interviews for parents as they can encourage them to try out something they might have resisted trying. Showing these adds to the power of the video modeling. Occasionally you may decide to show some reflections instead of the actual vignette of the same parent to provide variety to your group discussions. The reflections are discussed in the same way the individual video vignettes are with pauses for reflection and sharing.

Tip #6

Brainstorms & Buzzes. You may **pause any vignette** with a brainstorm or group buzz of parents' reflections and insights regarding video vignettes shown. These buzzes may be done in pairs, triads or small groups. You can keep your group engaged by varying the different ways you do brainstorm/buzzes. Sometimes you might do break-out small groups according to development, or age, or language level of their children, or by buddy assignments, or by parent goals. Many buzzes can be done in a group session and are key to keeping everyone actively involved. Use brainstorm/buzz handouts and a timer to keep them short.

Tip #7

Roleplay/Practices. You can do practices following any vignette shown, not just when indicated in the manual. You can decide to do these practices when parents have questions about how to apply the skill to their child's goal, or when they seem tired from discussion and need a change, or when someone shares a good idea but learning would be better understood to actually see what their idea looks like. As with children, the best parent learning is when they practice the ideas to explore what the strategy sounds, looks and feels like. Think about these practices when you show a video vignette - you can pause the practice any time to give feedback, discuss different approaches and then replay the scenario to try out another idea. Remember to incorporate puppets in your practices to model social skills and feelings.

Tip #8

Do not change the order of the program pyramid. It is essential that programs one and two, Promoting Positive Behaviors, be covered first before programs three and four, Handling Misbehaviors are shown. It is recommended that the Advance Programs be offered after Programs 1-4 for higher risk families and those with children with diagnoses such as ODD and ADHD or, for child-welfare referred families.

Tip #9

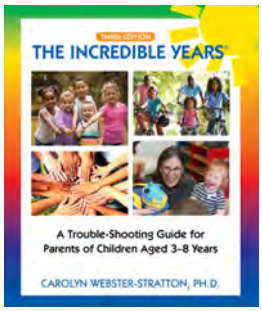
For high risk populations and diagnosed children do not try to do the entire BASIC series in fewer than 18-20, two-hour sessions. For prevention populations you can do the program in 14 sessions. Another idea, if you need to cut down the number of sessions to dovetail with a school term we suggest you just show foundational programs one and two in a 9-10 session Part 1 series. Later, the same parents could be offered programs three and four in another 9-10 Part 2 session series (make completing programs one and two a prerequisite for attending programs three and four in Part 2).

Tip #10

Tailor your recommended home activities and handouts to the material you cover in a particular session. You may tailor the handouts by telling parents which aspects of the home activities are recommended that week and then the following week indicate the additional parts to be completed. Additionally, parents complete self-monitoring checklists where they make decisions about their weekly goals and what is realistic for them to complete. A blank handout is provided in case you get behind and need to tailor the home activity according to material covered in that session.

Tip #11

Discuss and review home practice activities each week. Open each session with a discussion of their success with trying out some of the new parenting strategies as well as the barriers they encountered. Also ask about their reading assignments each week. This feedback can be done in small groups or pairs. Or, some weeks you may have each small group work on something different such as chapter reading, success with an approach or barriers to trying something different. The comments and reactions of parents trying new strategies will lead to spontaneous and relevant role play practices and key discussions.



Tip #12

Use weekly parent evaluations to tailor therapeutic group methods and content to parents' needs on an ongoing basis. Whenever a parent indicates a neutral or negative rating on one of the evaluation scales (group discussion, leadership skills, content of program, role play practices or use of video vignettes), call the parent and talk about how you will address this issue to make the program more meaningful for them. Periodically talk to the entire group about how you are using their evaluations to tailor the program to everyone's different learning needs and goals.

Tip #13

Encourage weekly buddy calls. Starting in session 2 or 3, parent home assignments involve parents getting in touch with their assigned parent buddy to take 5 minutes to share their experience with the assigned home activities. This can be done by phone, Zoom, email or text. This one-on-one exchange helps the group to develop supportive relationships more quickly and to reduce stress and depression. Pair up parents strategically, such as those who have children at similar developmental language and play levels or similar goals.

Tip #14

Group leaders call or meet online with parents in your group weekly, especially for the treatment model of the program. A short weekly check-in with your parents provides an opportunity for you to connect privately to discuss parent feedback on their home experiences and progress toward their goals. This will enhance your relationship with each parent and may give you insights into what you want them to share in the group. Sometimes during these online calls you can set up a brief practice with their child.

Online calls are also a very helpful way to do make up sessions for times when parents have missed their group session. You can show them video vignettes, discuss key principles and explain home assignments.

Tip #15

Add in-person home or individualized coaching as needed. Sometimes you may want to add home coaching sessions for parents attending your group who are struggling with some of the parenting methods. This allows you to show and discuss additional vignettes tailored to their situation or child’s developmental level. This also permits you setting up practice interactions with their children where you can coach, model and give feedback to parent-child play interactions

Part 6
Certification

1. Becoming a Certified Group Leader
2. Certification Road Map
3. Steps to Becoming Certified
4. Training and Certification Progression
5. Certification Application Form
6. Peer & Self-Evaluation Form
7. Group Leader Collaborative Process Checklist
8. Certification as a Peer Coach
9. Certification as a Mentor
10. Group Leader Coaching/Mentoring Gems
11. Evaluation of Supervision or Mentoring

Important Notes to Remember

NOTE: The evaluations and forms in this section may be kept as master copies and photocopied for reuse with your parent groups. All copyright information must be maintained and you may not alter any of the content on these materials.

These forms are also available on our website, www.incredibleyears.com (in *Group Leader Resources* section).

The Incredible Years®

Introduction

Becoming a Certified* Incredible Years Group Leader

Receiving Incredible Years® (IY) Group Leader Training from a certified IY Mentor/Trainer is the first of eight steps toward becoming certified as an IY Group Leader.

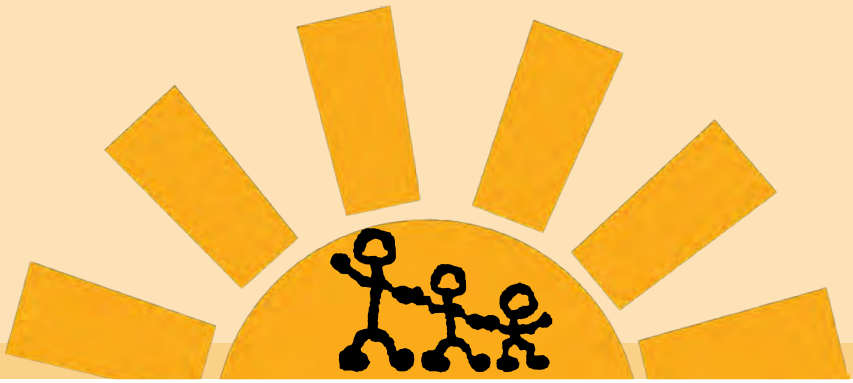
After attending the initial group leader training, it is highly recommended you engage in ongoing peer review, coaching, and consultation from certified Peer Coaches, Mentors, or Trainers.

Participating in this continued coaching and consultation process is not only helpful in assuring your clinical competence but also gives you the opportunity to continue on the path to becoming a certified Group Leader.

Becoming certified means you are offering the program with high quality and fidelity. Our research shows that certified group leaders have stronger, more sustainable outcomes (and lower drop-out rates) than when programs are offered by non-certified group leaders.

This portfolio will help you keep track of each of your certification steps in one spot. You will find group checklists, fidelity measurements, evaluations, and more!

*The terms “Certified” and “Accredited are used interchangeably.



Why Become Certified?

The certification/accreditation process is considered to be of value for many reasons:

+ The process of certification is considered part of the ongoing training process (after the initial workshop) wherein the leader shows videos of their sessions and receives feedback and consultation from accredited coaches and mentors on their group leadership ability.

+ The certification process maximizes the quality of IY group leader performance and program delivery fidelity. Certified group leaders implementing the full program have been shown to produce results similar to those in the published literature*.

+ Group Leader certification will grant listing as a Certified IY Group Leader with our center. Incredible Years® may recommend Certified IY Group Leaders for potential employment as a leader of groups.

+ Certified leaders will be invited to Incredible Years® workshops that provide consultation, updates on our program materials and methods, as well as provide a forum for sharing ideas and developing a support network with other group leaders.

+ Certification grants eligibility for an invitation to continue training to become an Incredible Years® Certified Peer Coach and/or Mentor of group leaders in selected programs.

*Webster-Stratton, C., Reid M.J., and Marsenich, L. 2014. Improving Therapist Fidelity During Implementation of Evidence-based Practices: Incredible Years Program. *Psychiatric Services,* Vol. 65 No. 6. 65:789–795.

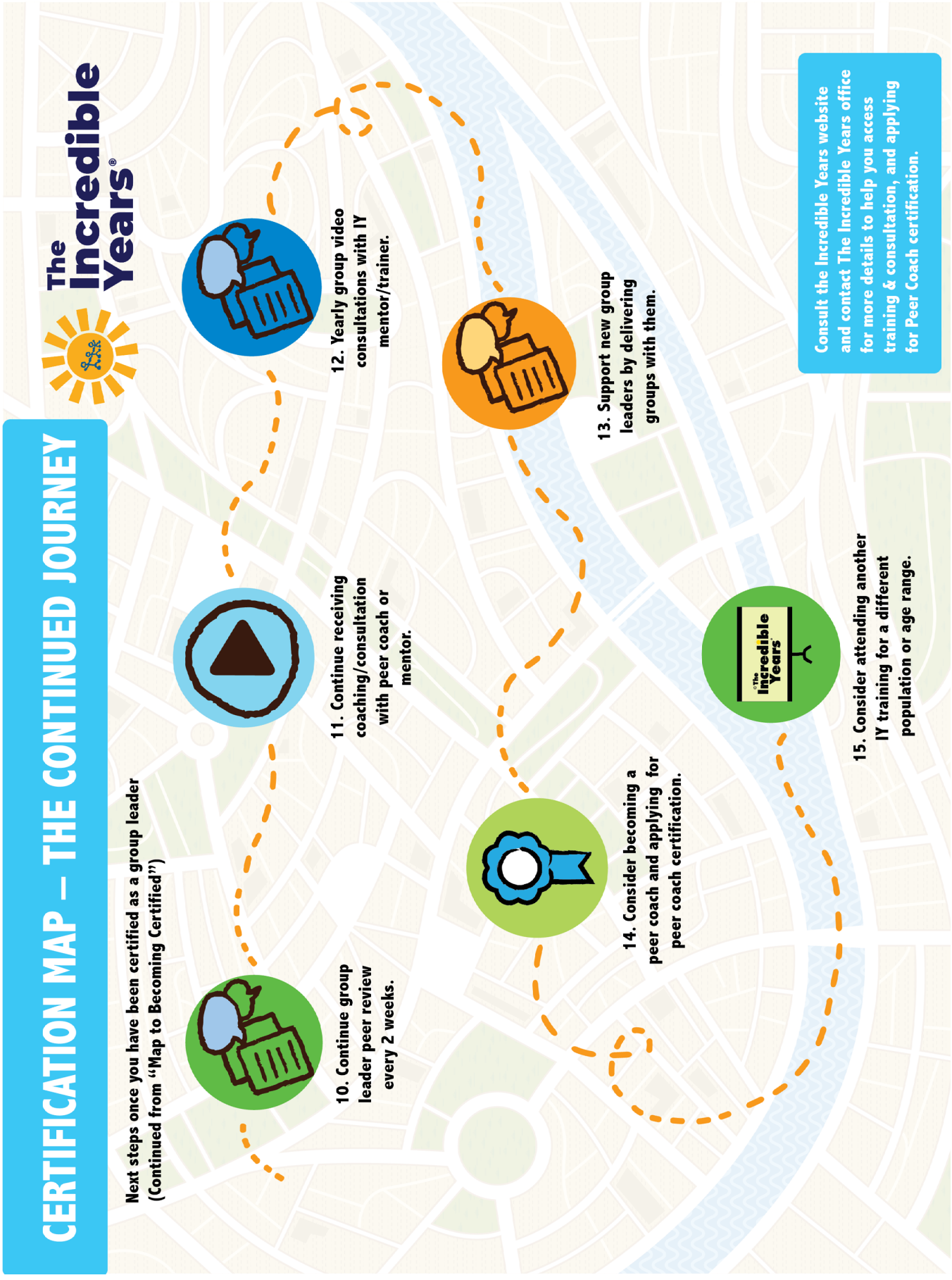
Map to Becoming Certified

Basic steps to become a certified IY Group Leader

START

1. **Attend an IY training.**
2. **Acquire the appropriate program for your population.**
   (You may do this step prior to attending training.)
3. **Self Study using Leader's Manual & videos (with coleader).**
   (You may begin self study prior to training if you have the program materials.)
4. **Start recruitment and planning for your groups.**
5. **Implement first group & start video recording your sessions to review weekly with co-leader.**
6. **Obtain consultation with an IY Peer Coach, Mentor, or Trainer and continue weekly peer review.**
7. **Share video of one session for certification review from an authorized IY mentor/trainer.**
   (If your agency has an IY Peer Coach or Mentor, ask them to review your video with you first to decide if it is ready to be sent to an authorized IY Mentor/Trainer for certification review.)
8. **Implement second group. Continue weekly peer review and ongoing consultation. Prepare your follow-up video for certification review.**
9. **Once video review passes, send all paperwork to IY headquarters. Application is reviewed and certification is awarded. Congratulations!**

See next page for what comes next, once you are certified as a group leader.



Getting Started

STEP ONE: ATTEND A CERTIFIED TRAINING

The very first step toward certification is to attend a certified Incredible Years® Training Workshop.

To achieve positive outcomes similar to those reported in published studies, group leaders should attend an authorized training from one of our certified Incredible Years® Mentors or Trainers, as well as undergo the Incredible Years® certification process.

Open-enrollment training workshops are offered regularly online through the Incredible Years headquarters. They are delivered over 5 3-hour sessions, spread out over 2-3 weeks. Also, our certified Incredible Years® trainers can provide on-site face-to-face training in your community upon request. These in-person training workshops are delivered over 3 full days. Both online and in-person training workshops are delivered in small groups (online maximum 15 people; in-person maximum 25 people), designed to give leaders a detailed introduction to the content and process of leading the IY groups, with role playing, practice mediating vignettes, and troubleshooting difficult issues. This is the first step in the training process.

We recommend your agency complete our Agency Readiness Questionnaire in planning for launching an IY program and leader training workshop selected. It is important to carefully select your group leaders for training and to include 2 people from your agency. Contact us for more information at: incredibleyears@incredibleyears.com

BACKGROUND QUALIFICATIONS

Group leaders come from many disciplines, including counseling, social work, psychology, psychiatry, nursing, and education. It is recommended that potential Group Leaders have prior training in child development, and cognitive social learning theory. They should have at least two years' experience with young children, as well as an understanding of parenting skills and family interactions.

Group leaders should possess excellent interpersonal skills, leadership skills, and have had involvement with group activities and an awareness of group dynamics.

STEP TWO*: ACQUIRE APPROPRIATE PROGRAM FOR YOUR POPULATION

In order to implement the program, you will need to acquire the program materials. Your agency may already own the program set, or you may need to purchase it from The Incredible Years® office. The program(s) selected will depend on your agency's assessment of community risk factors and goals in regard to age group targeted or priority in regard to either a prevention or treatment focus with parents, teachers, or children. If you have questions about which program(s) you will use, take a look on our website: https://www.incredibleyears.com/early-intervention-programs

You can email us if you have questions about what to order. We are happy to help make sure the program you select addresses your goals and target population age group or risk status: incredibleyears@incredibleyears.com

You may purchase the program prior to attending training (while this is marked as the second step, some group leaders may already own the materials prior to step 1)

STEP THREE: SELF-STUDY USING LEADER'S MANUAL AND VIDEO VIGNETTES

In addition to the initial workshop, it will be important to further your learning about the program by doing your own self-study. Read through the introductory sections of your leader's manual, read through the full textbook that comes with your program curriculum set (*Collaborating with Parents to Reduce Children's Behavior Problems*), and read or listen to the audio version of the parenting book (*The Incredible Years: A Trouble-Shooting Guide for Parents of Children Aged 3-8 Years)*. Watch the video vignettes using your manual guide. ***It is ideal if you do this study with your co-leader*** *and practice leading vignettes with each other or conduct a mock group.*

The Incredible Years "Experts in Action" manual and videos can be purchased along with your program curriculum set. These videos show certified IY Mentors and Trainers leading the groups and are intended to enhance group leader's understanding of implementation practices. There is an accompanying manual that provides questions and considerations to think through as you watch the videos.

NOTE: If you already have the program curriculum materials prior to training, you could begin this self-study at any time. Studying materials prior to actual training will enhance your learning because you will have opportunities to ask about things you have read or practiced.

STEP FOUR: START RECRUITMENT AND PLANNING FOR YOUR GROUPS

1. Recruitment of families involves preparing a brochure, advertising programs, in-person meetings and presentations with administrators, teachers and parents in schools, child-welfare workers, and other referral sources. There are preview videos for each of the different types of programs (Parent, Child, or Teacher) which you can use to explain how the programs work, available on our YouTube channel: www.youtube.com/@TheIncredibleYears

2. Plan the location, date, and time for your groups. Send out questionnaires to participants ahead of time regarding their preference for meeting day/time, whether or not they will need childcare, if they require transportation assistance, needs for translators, or any other special needs. When offering childcare, be sure to train these childcare providers in advance.

3. Utilize the planning materials found in this group leader's manual. These forms are imperative in the planning and implementation process! Weekly agendas and checklists provide detailed information regarding the format and agenda for each session. Fill out the session checklists each week, have participants complete weekly and final evaluations, engage in peer review, follow the process checklist, etc. You will be asked to share these checklists with your coach or mentor at consultations. Even though your paperwork for certification will not be sent in until later, it is vital that you use all these forms from the start. Once your video review passes you will need to send paperwork, including checklists and evaluations from two complete groups.

IMPORTANT NOTE!

Contact incredibleyears@incredibleyears.com for a Brand License Agreement. Once you read this document and sign it, you will be granted permission to use the IY logo (which we will send you). This agreement provides very important information on how you can legally advertise that your agency is using IY, both in print and online, while ensuring that you do not violate IY intellectual property rights.

Remember to give yourself a pat on the back for all the hard work you have put in so far!

Video Review & Feedback

STEP FIVE: IMPLEMENT FIRST GROUP & START VIDEO RECORDING YOUR SESSIONS TO REVIEW WITH CO-LEADER

Begin implementing your groups! Start video recording yourself right away so that you can get used to being recorded and feel more natural in front of the camera. Review these video recordings **weekly** with your co-leader to reflect on group leadership skills & knowledge, and establish individual goals. Use the Group Leader Collaborative Process Checklist and the Peer and Self-Evaluation forms. By reviewing your videos together, you can self-reflect on your group leadership process and methods and determine goals for your learning and future sessions

The camera only needs to be focused on you. Reassure parents that this is a confidential video only to be used for your further professional development and will be destroyed after your video review has been completed.

STEP SIX: CONNECT WITH A PEER COACH OR MENTOR AND CONTINUE CO-LEADER REVIEW.

If your agency has a certified IY Peer Coach or Mentor, we recommend that you and your co-leader set up a minimum of three 1-hour video review consultation sessions during your first group.

If your agency does not have a certified IY Peer Coach or Mentor, certified Incredible Years® Mentors and Trainers are available for online consultation calls through Incredible Years headquarters. During these sessions you and your co-leader will identify your goals and show selected video segments of your group.

There should be at least 6 parents in attendance at the parent group session you record and share - this is considered the lowest threshold for assessing group processes.

Ideally, you and your co-leader should receive these consultation calls 2-3 times during your first group. By doing this early, you can get feedback and support for your approaches and learn of new strategies you can use to make your groups more successful. When done early in your first group this will move you faster towards certification!

Consultation can be obtained by contacting the Incredible Years® office:
incredibleyears@incredibleyears.com

Group Consultation with Certified IY Mentor or Trainer

In addition to obtaining Peer Coach or Mentor consultation related to your group, we also recommend Mentor-led group consultation. Ideally, there should be one of these consultations for every group. During these sessions, you will meet either in person or online with other group leaders (6-12 group leaders). In these meetings, group leaders share small segments of video of their sessions with each other. This is a valuable opportunity to learn from the experiences of other group leaders and to discuss topics related to dissemination, as well as clinical and research issues.

Continue Weekly Peer Review

Continue weekly peer video review session planning meetings with your co-leader.

Praise yourself for your dedication to helping families!

STEP SEVEN: SHARE VIDEO OF ONE SESSION FOR CERTIFICATION REVIEW FROM AN AUTHORIZED IY MENTOR OR TRAINER

Share a video of one of your sessions for a detailed review by an authorized Incredible Years mentor or trainer.

TIPS FOR A SUCCESSFUL VIDEO REVIEW:

- Review your video yourself with the Group Leader Collaborative Process Checklist (to make sure all aspects are covered) and the Group Leader Self Evaluation form. Please send these two forms along with the video for review.
- Record the entire 2-hour group session (with the opening and closing of session).
- Be sure your video shows you as the group leader (not just the group or your co-leader).
- If you have a co-leader on your video, you must take responsibility for leading most parts of all the major session components, so we can see you "in action." (E.g., mediating vignettes, setting up practices, leading discussions, explaining key principles and reviewing homework.) However, the mentor/trainer will also want to see how you work with your co-leader and share aspects of the leadership process.
- If your agency has an IY Peer Coach or Mentor, ask them to review your video with you first to provide feedback and decide if it is ready to be sent to an authorized IY Mentor/Trainer for certification review.

You will receive detailed feedback from the Mentor/Trainer. Then, use the recommendations from their view of this session to strengthen your group leadership methods or processes. You will submit a 2nd session video recording that addresses the suggestions from your prior review. After your 2nd submission, you will receive feedback about whether or not a 3rd review will be required. It is common to submit 3 (or occasionally more) sessions prior to accreditation. Engaging in peer coaching or consultation prior to submitting your certification video can provide valuable feedback and insight, helping to ensure your submission aligns with the evaluation criteria and setting you up for a successful review process.

Incredible Years Certification Video Reviews Live Online

Incredible Years trainers are available to deliver video reviews for certification live over Zoom! An online video review is an opportunity for a group leader to show a recording of their parent group session in an online meeting with their mentor/trainer. In this way aspects of the group leader's delivery, including strengths and goals, can be explored collaboratively. This is done through discussion, as group leaders explain thought processes and rationale(s) for decisions made and mentors/trainers share good practice tips and offer ideas and suggestions as appropriate and helpful. In this way the video review process is dynamic and energizing. Group leaders who have been involved in online video reviews have informed us that this process became an enjoyable and valuable part of their IY learning journey.

Checklist for Group Leader Video Review
How to Prepare Your Video for Certification Review

_____ Application form filled out
_____ Review and prepare video for review with video time codes
_____ Leader Collaborative Process Checklist filled out for this video
_____ Session Agenda Checklist for this video
_____ The camera is focused on you, the leader
_____ You (the group leader) are the main leader for the full session
_____ There are at least six (or more) parents in the group who are attending this session

FIRST you will have your group session video reviewed - once you have passed your video review, THEN send the rest of your paperwork to Incredible Years headquarters. We will be in communication with you throughout this process to let you know what items we still need, and when you should send them!

Ideally, you will have peer coach feedback and/or consultation before submitting a video for certification.

Please contact us for more information, at incredibleyears@incredibleyears.com

Keep in mind: sometimes a leader will need a 3rd review before their video passes.

STEP EIGHT: IMPLEMENT SECOND GROUP

Use the detailed feedback from your first certification video review to strengthen your group leadership methods and processes.

Continue weekly peer review of video recordings with your co-leader. Continue coaching/consultation sessions with peer coach/mentor (minimum 3 coaching/consultation sessions recommended). If possible, attend one mentor-led group consultation (with 6-12 group leaders) in-person or online.

Prepare and share your follow-up certification video review with an authorized IY mentor/trainer.

Paperwork

STEP NINE: ONCE VIDEO REVIEW PASSES, SEND ALL PAPERWORK TO IY HEADQUARTERS

_____ Application form*

_____ Letter discussing your interest in becoming certified; your goals, plans, and philosophy of effective parenting and your clinical experience (one page)

_____ Background Questionnaire*

_____ Two professional letters of reference

_____ Parent weekly* and final* evaluations for two groups (Minimum 6 parents finishing each course)

_____ Attendance Lists for two groups (at least 50% retention)

_____ Session agenda checklists* for all sessions from two groups

_____ Two co-leader peer evaluations*

_____ Two self-evaluations*

_____ Passing video review report from Certified IY Mentor or Trainer

*These forms can be found in this manual AND/OR for download on our website: incredibleyears@incredibleyears.com

There is a certification application fee which includes up to two video reviews and supervisory reports, review of application materials, and certificate of certification. Contact us for the current fee.

Send Materials to:
Email: incredibleyears@incredibleyears.com

Incredible Years, Inc.
Certification Committee
3240 B Street NW, Suite D
Auburn, WA 98001 USA

Certification - The Continued Journey

STEP TEN:

Post-certification, continue group leader peer video review with co-leader every 2 weeks.

STEP ELEVEN:

Continue receiving coaching/consultation with Peer Coach or Mentor (2-3 consultatations per group).

STEP TWELVE:

Yearly group video consultations with IY Mentor/Trainer.

STEP THIRTEEN:

Support new group leaders by delivering groups with them and reviewing videos together (using the Collaborative Process Checklist).

STEP FOURTEEN:

Consider becoming a Peer Coach. Agency support will be required for this, alongside a recommendation from a Mentor or Trainer. You can discuss this with your Coach or Mentor, or contact Incredible Years headquarters.

STEP FIFTEEN:

Consider attending an adjunct or supplement training for different method of delivery (e.g. Parent Home Coaching) or a different population or age group (e.g., Autism Parenting, Baby Parenting) See the Incredible Years website for programs and training options. www.incredibleyears.com

My Incredible Years® Learning Journey

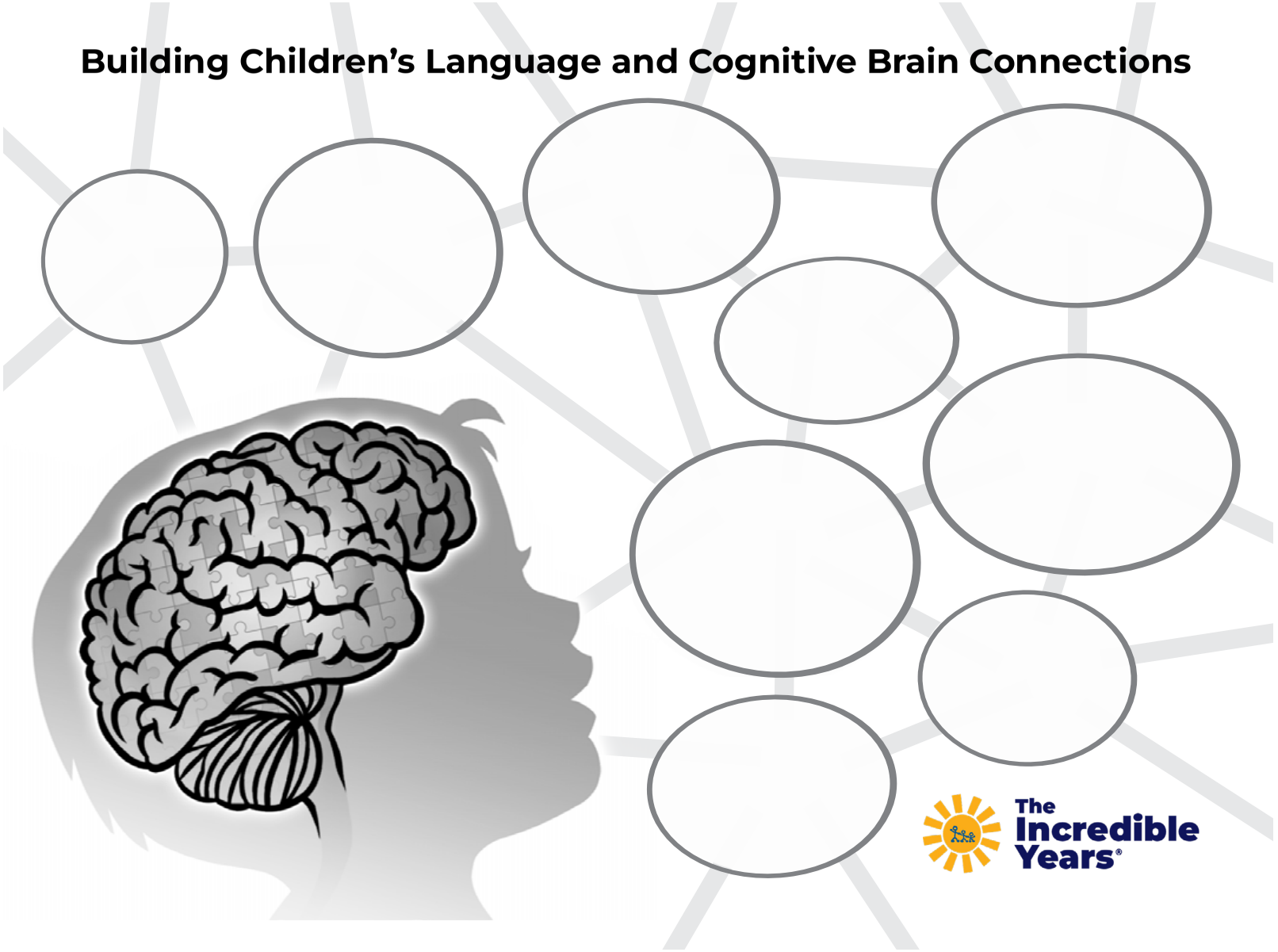
The following checklist corresponds to the steps listed on your "Map to Becoming Certified." You can use this checklist to keep track of where you are at in the process!

	Date(s) Completed	Peer Coach/Mentor/Trainer
Step #1: Attend Incredible Years® Training		
Step #2: Acquire Appropriate IY Program		
Step #3: Self-Study program manual/videos with co-leader		
Step #4: Start Recruitment & planning		
Step #5: Implement first group and begin recording sessions		
Step #5: Conduct Weekly Peer Review with Co-Leader		
Step #6: Schedule consultation sessions (in-person or on-line) with Peer Coach, Mentor, or Trainer		
Step #7: Review video with Peer Coach or Mentor to determine readiness for certification (if possible)		
Step #7: Share first video for review from authorized IY Mentor/Trainer		
Step #8: Implement second group and continue weekly peer review with co-leader		
Step #8: Continue receiving consultation with peer coach, mentor or trainer (online or in-person)		
Step #8: Send second Video for review from authorized IY Mentor/Trainer		
Step #9: Once your Video review is Passed by IY Mentor/Trainer, send all paperwork to IY Headquarters		
Step #9: Application is reviewed. You will receive a letter of certification as group leader!		

Brainstorm/Buzz: Building Children's Language and Cognitive Brain Connections

Write in ways you will focus on promoting and strengthening your child's language and conversation skills.

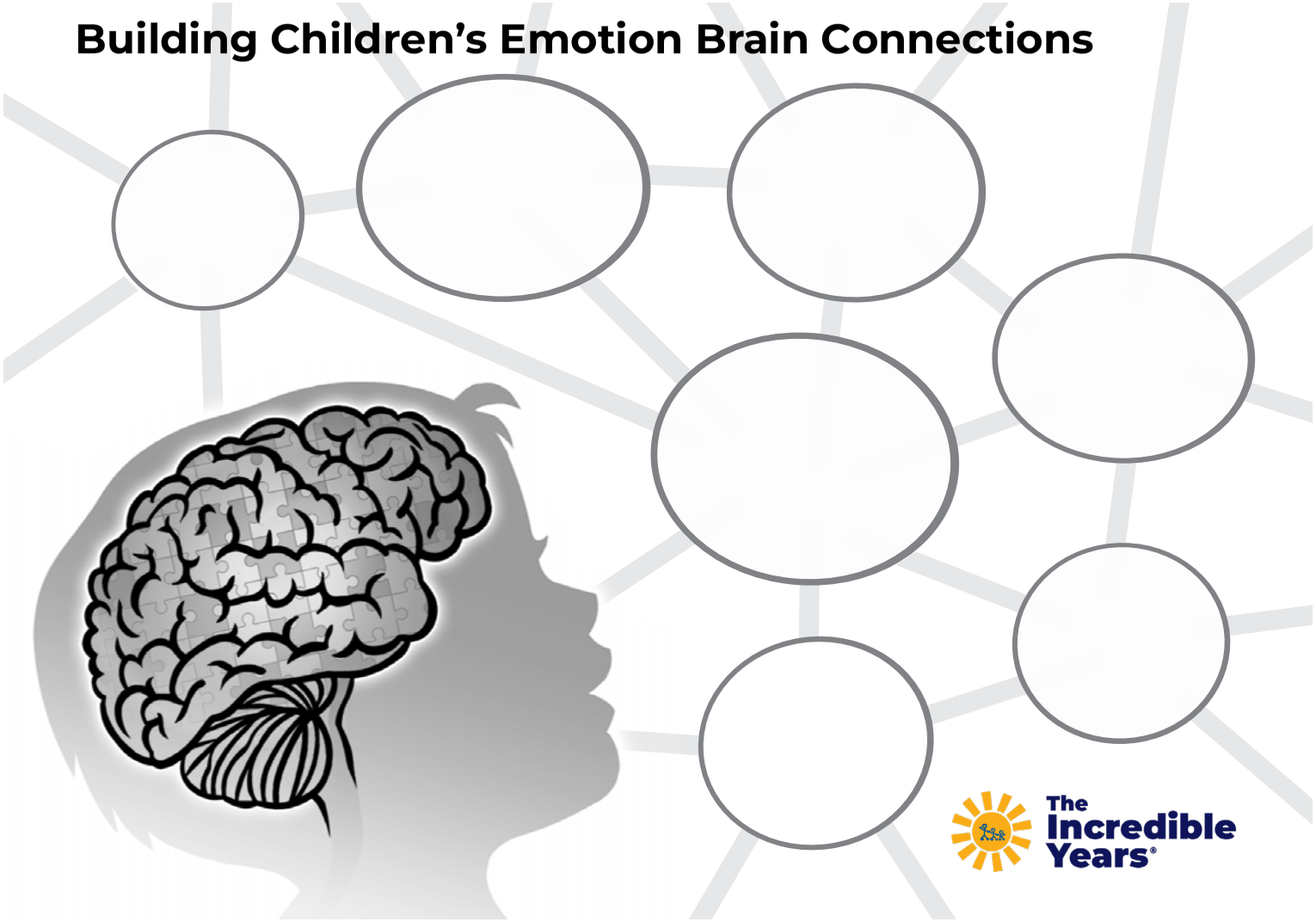
Building Children's Language and Cognitive Brain Connections



Brainstorm/Buzz: Targeting Emotion Language to Enhance

Think about what emotion vocabulary your child understands and can speak. Choose a positive feeling and pair with its opposite feeling to teach your child. For example, brave vs scared, angry vs happy, frustrated vs calm, or confident vs nervous. Think about what feeling words you want to strengthen and model in your interactions. Write these in the neuron spaces below.

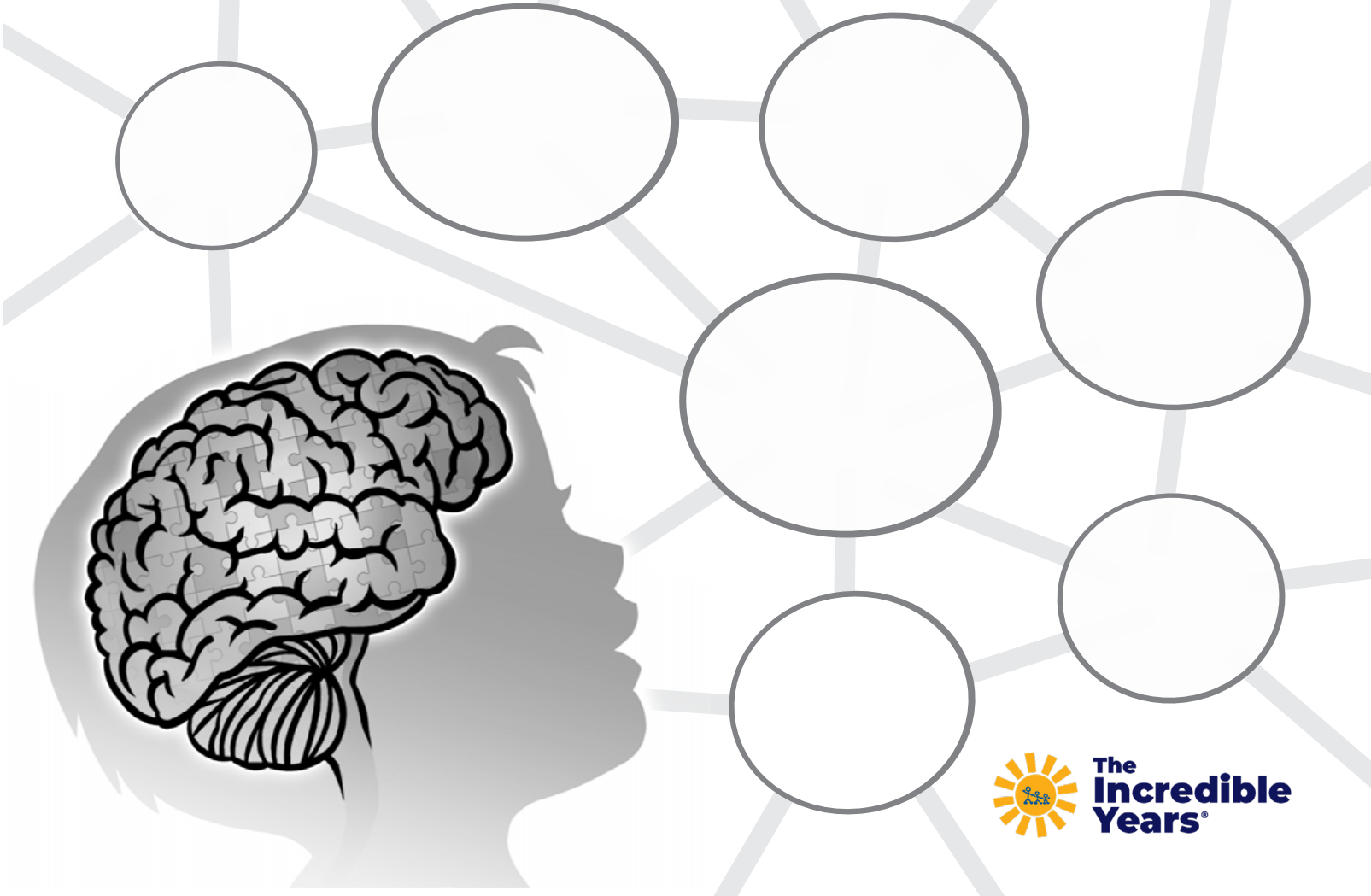
Building Children's Emotion Brain Connections



Brainstorm/Buzz: Target Social Skills

Think about the specific social skills you want to encourage in your child. Write these in the neuron spaces below.

Building Children's Social Brain Connections



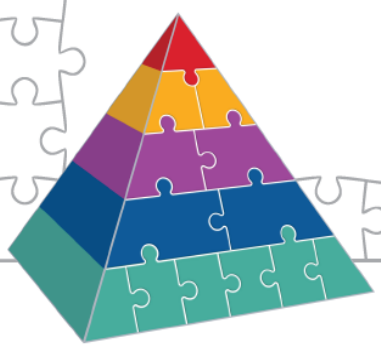
The Incredible Years®

1

REFRIGERATOR NOTES

MAKING MEALTIMES ENJOYABLE

- Involve your child in food shopping, meal planning, preparation, & cooking.
- Set up a predictable routine for mealtimes at a scheduled time each day.
- Offer a transition time before dinner that includes washing hands or setting the table.
- Try to make mealtimes a relaxed and fun time for your child.
- Eliminate distractions during mealtimes such as TV, video games or phone use during meals.
- Provide your child with a choice of healthy foods to allow for independent decision making.
- Introduce one new food at a time in a small amount; for example, offer the new food along with your child's favorites.
- Try to offer a meal with at least one food choice you know your child likes.
- Offer child-size portions–which is much smaller than adult portions.
- Don't expect your child to like a whole lot of foods–let your child make their own decisions on the food they choose to eat. Forcing your child to eat will only make your child more stubborn and less open to new foods in the future.
- Ignore complaints about food and refusals to eat and praise what your child does eat.
- Compliment others at the table who are eating and using polite manners.
- Be a role model by eating healthy food yourself and talk about what you are eating – its texture, color, shape, size & benefits.
- Talk about food and family traditions and use mealtime as a chance to have conversations.
- Don't expect your child to sit for a long time at the table.
- Once your meal time has ended, avoid giving your child unhealthy snacks between meals.
- Use books and pretend cooking play to encourage discussions about healthy eating and mealtime rules & routines.



1

REFRIGERATOR NOTES

Promoting Your Child's Healthy Media Diet (2 to 6 years)

Excessive screen time can affect a child's development, impacting friendships, physical fitness, sleep, and even their interest in reading and school success, and can increase children's aggressive behavior. Here are some tips to help your child develop healthy screen time habits, while minimizing negative effects.

1. Set Screen Time Limits

- **Under 2 years:** Discourage screen time.
- **Ages 2-5 years:** limit to one hour/day of high quality programming
- **Ages 6-12:** limit to 90 minutes/day

2. Monitor Content

- Use Websites such as Common Sense Media https://www.commonsensemedia.org/ to choose age-appropriate content.
- Take an active role in your children's media education by watching TV programs with them and participating in their computer games to discuss characters, behaviors, and the messages portrayed, especially during commercials.

3. Keep all screens in Common Areas

- Put devices in shared spaces so that it is easy to monitor or track your child's screen time use.
- Set and enforce daily screen time limits and reward your child for healthy viewing habits and following the screen time rules.

4. Create a Screen-Free Bedtime Routine

- Avoid screen time 1 hour prior to bedtime.
- Keep computers, smartphones or TVs out of your child's bedroom to promote better sleep.

5. Balance Screen Time with Other Activities

- Encourage physical activity, reading or some other social play time.
- Designate family "screen free" times or days to foster meaningful connections.

6. Model Healthy Habits

- Set a positive example by modeling healthy screen time habits

See https://www.healthychildren.org/English/fmp/Pages/MediaPlan.aspx for a tool developed by the American Academy of Pediatrics to create your own family media plan.

1

The Incredible Years®

REFRIGERATOR NOTES

Promoting Children's Healthy Lifestyle and Well-Being

- **Promote Daily Physical Activity:** Encourage your children to be active every day by offering a variety of fun options during child-directed play. Activities like tag, Frisbee, jumping rope, swimming, dancing, soccer, or even walking to the park can help them enjoy movement. Participate with them to make it more fun, and emphasize how these activities keep our bodies strong and capable.
- **Focus on Healthy Choices, Not Weight:** Avoid making comments about weight - whether yours or your child's. Instead, focus on healthy choices that support strong bodies and an active lifestyle. For example, you can say, *"These exercises help keep us strong so we can play, climb, dance, and have fun!"* This helps children develop a positive relationship with their bodies.
- **Limit Screen Time:** Set a limit of no more than 1 hour of screen time for children over 2 years of age.
- **Offer Healthy Snacks:** Provide nutritious snacks such as fruits, vegetables with yogurt or hummus, or whole-grain crackers. Limit snacks that are high in fat, sugar, or salt. Encourage your child to enjoy meals and snacks at regular times instead of constant grazing, which helps them develop better eating habits.
- **Moderation with Treats:** Offer "treat" foods in moderation. Instead of banning sweets completely, help children learn how to enjoy them in reasonable amounts. For example, say, "It's okay to have a small treat today, but tomorrow we'll focus on healthy foods again." This teaches them balance.
- **Serve a Variety of Healthy Foods:** At mealtimes provide a variety of nutritious foods including fruits and vegetables, whole grains, lean meats. This exposes children to different tastes and textures, helping them develop a preference for a wide range of healthy foods. Avoid foods high in trans fats and saturated fats.
- **Encourage Self-Serving:** Allow your child to serve themselves at mealtimes. Don't force them to clean their plate, but do encourage them to have more of healthy foods they enjoy. This helps children learn to listen to their hunger signals and eat according to their needs.

(page 1)

1

REFRIGERATOR NOTES

Promoting Children's Healthy Lifestyle and Well-Being (continued)

- **Avoid Restrictive Diets:** Do not put your child on a weight-reduction diet unless supervised by a physician. For most young children, the focus should be on maintaining their current weight while continuing to grow taller and stronger.
- **Encourage Healthy Beverages:** Offer water or low/non-fat milk as primary beverage options. Limit sugary drinks like soda and juice, which provide little nutritional value. This helps children develop healthy hydration habits.
- **Make Family Meals Special:** Establish predictable family meals where everyone can talk and enjoy food together. Make mealtime a "no-screen" time, so everyone can engage in conversation and bond over the meal. This fosters healthy relationships with food and family.
- **Involve Children in Meal Planning:** Let your children participate in food planning, shopping, and meal preparation. This involvement gives them a sense of ownership and encourages them to try new foods. It also helps them understand where food comes from and the importance of balanced eating.
- **Communicate with Caregivers:** If your child is in childcare, make sure caregivers are promoting healthy eating habits and limiting junk food. Regular communication ensures that everyone is on the same page when it comes to supporting your child's health.
- **Be a Positive Role Model:** One of the most powerful ways children learn healthy habits is by observing you. Model healthy behaviors by staying physically active, eating nutritious foods, enjoying family meals, and talking positively about your own healthy body. Your actions will inspire them to do the same.

(page 2)

Brainstorm/Buzz: Effective Limit Setting - How Would You Respond?

What could you say to your child for transition warning? How could you respond to the child's refusal and disrespectful attitude?

Practice - Effective Limit Setting

The Incredible Years®

Transition warning

Parent request

Wait 5 seconds

Child resists

Parent response

Child grudgingly complies

Parent response

Brainstorm/Buzz: How Could You Respond?

How could you respond to your child's resistance or challenging response to a limit you set?

Practice - How could you respond?

Transition warning

Parent request

"Turn the screen off, it's time for bed."

Wait 5 seconds

Child refuses

"No, I won't. I'm in the middle of a show."

Parent response

Child grudgingly complies

Parent response

1) *Ineffective Limit Setting*: Anger Trap

Parent request

"Turn the TV off now it's time for bed."

Wait 5 seconds

Child refuses

"No, I won't. I'm in the middle of a show."

Parent threat

"If you don't go to bed now you'll be in BIG TROUBLE."

Child rebuttal

"I hate you!" (grudgingly turns off TV)

Parent (angrily)

"Don't you EVER talk to me like that!"

ANGER

2) *Ineffective Limit Setting:* Avoidance Trap

Parent request

"Turn the screen off, it's time for bed."

Wait 5 seconds

Child refuses

"No, I won't. I'm in the middle of a show."

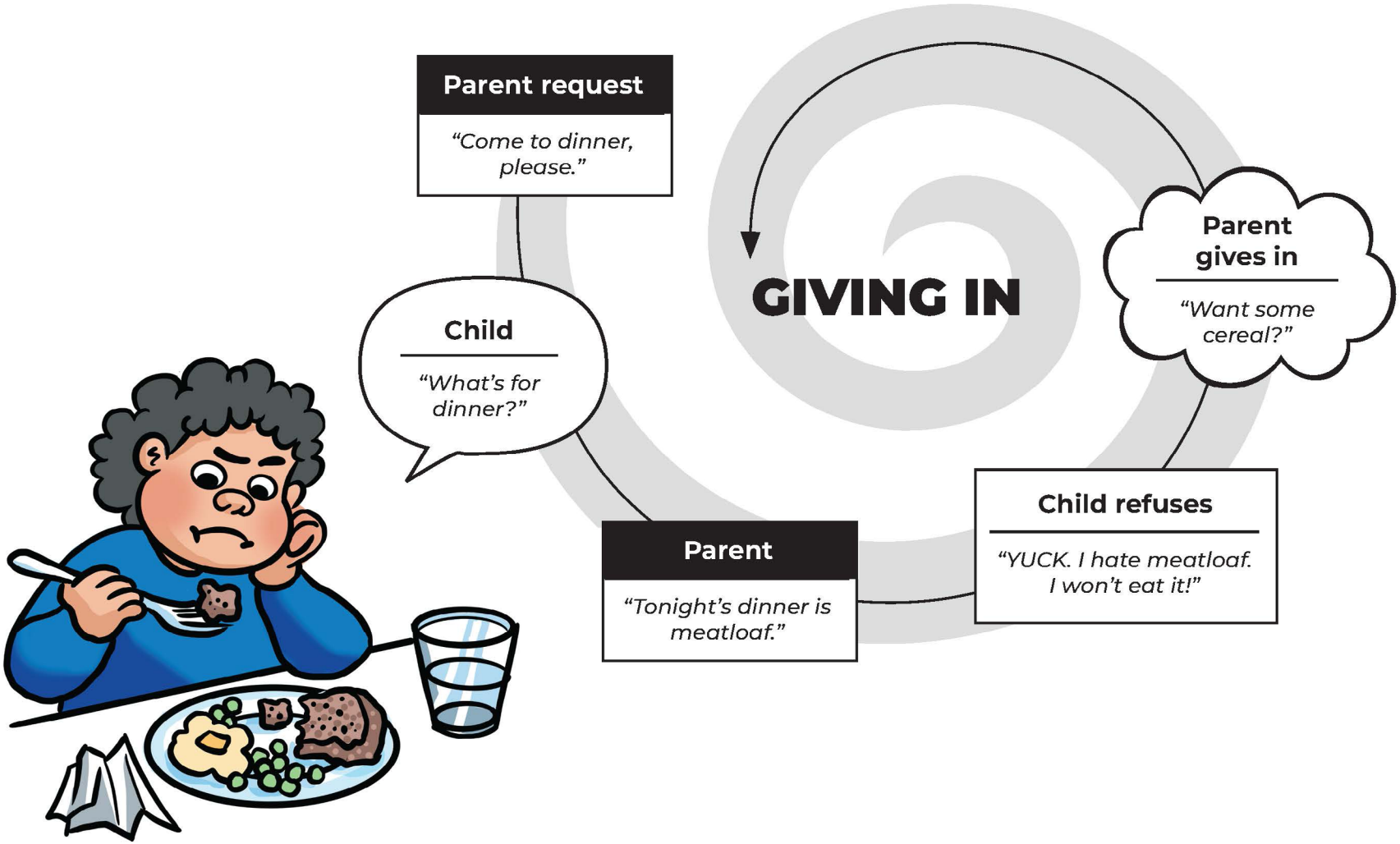
AVOIDANCE

Child continues to watch screen

Parent withdraws

"I don't have time to deal with a tantrum right now."

Ineffective Limit Setting: Giving In Trap



Brainstorm/Buzz: How Could You Respond?

How could you respond to your child's rejection or refusal of food at mealtime?

Practice - How could you respond?

Parent request

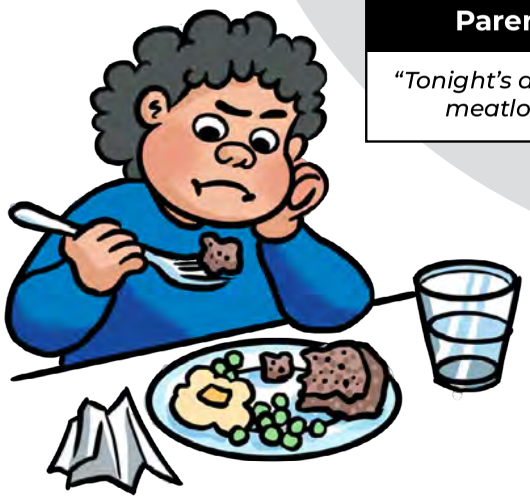
"Come to dinner, please."

Child asks

"What's for dinner?"

Parent

"Tonight's dinner is meatloaf."



Child refuses

"YUCK. I hate meatloaf. I won't eat it!"

Parent response

Child complies

Parent response

4) Effective Limit Setting

Transition warning

"You have 5 min left of screen time."

Set timer for 5 minutes

Wait 5 minutes

Parent request

"Time is up! Please turn the screen off."
(TV, computer, tablet, phone)

Wait 5 seconds

Child refuses

"I don't want to. I'm not done yet!"

Parent ignores angry tone

Parent response

"If you don't turn it off now, then you will lose tonight's screen time."

Child grugingly complies

"That's not fair! Well, okay."
(turns off screen)

Parent response

"You made a great decision. Thanks for listening! What would you like to do now?"

Discipline Hierarchies - Steps 1 - 4

For Nondisruptive & Disruptive Behavior

The Incredible Years®

1 Rules & Routines

- Nonverbal Cues
- Clear Rules
- Predictable Schedules
- Clear Transitions

2 Effective Limit Setting

- Positive Verbal Redirection
- Distraction & Re-engagement

3 Emotion Regulation

As child begins to get upset, **coach calm down strategies:**

- Deep breaths
- Coach feelings
- Positive visualization
- Turtle shell
- Positive Self-Talk

4 Ignore, Distract, & Redirect

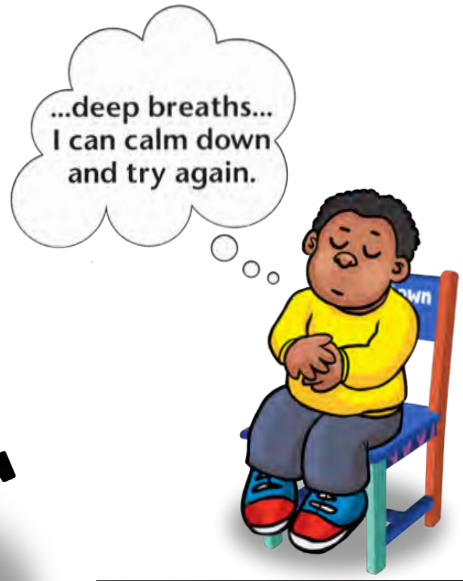
- **IGNORE** non-aggressive behavior (tantrums, whining)
- **COACH & PRAISE**

Discipline Hierarchies - Steps 5 - 8*

The Incredible Years®

5 Logical Consequences

- Loss of computer or screen time
- Activity removed
- Loss of privilege
- Work chore imposed

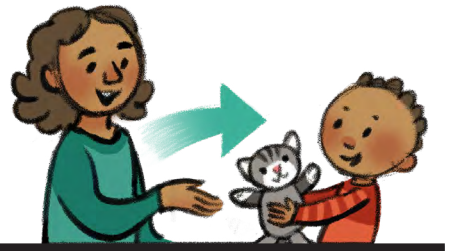


6 Positive Time Out

- For aggressive or destructive behavior
- 3-5 minutes Positive Time Out to Calm Down

7 Review Behavior Plan

- Increase positive attention for positive behavior
- Use incentive to motivate positive behavior
- Check that no attention is given to negative behavior
- Parent/Teacher conference to coordinate home/school plan
- IEP referral



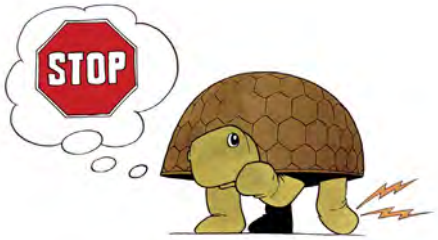
8 Practice for Success

- Model, coach & practice positive alternate behaviors in child play times
- Reconnect with child after discipline encounters
- Continue to use responsive interaction and build positive relationships

**Always use the lowest and least intrusive approach first*

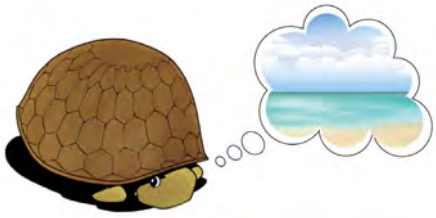
Calm Down Thermometer

I can do it. I can calm down.



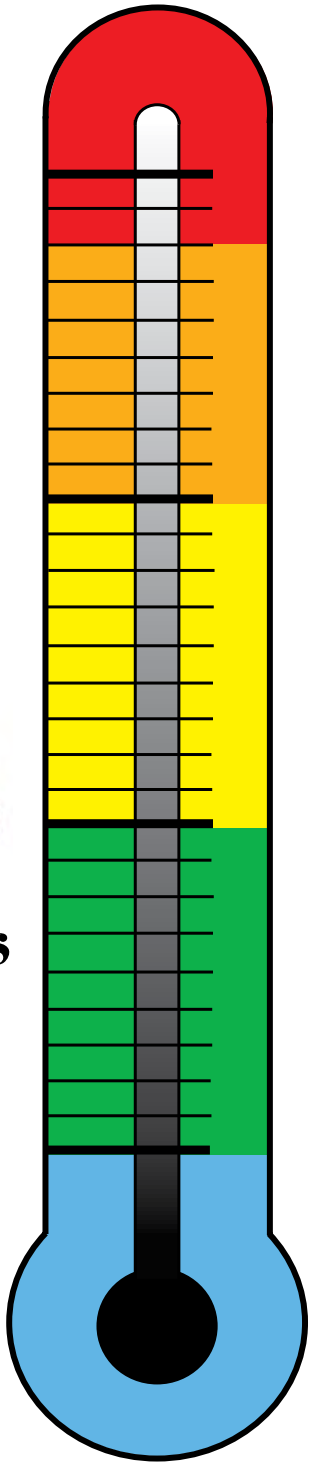
Think “Stop”

Take 3 deep breaths



Think happy thoughts

Stay cool



The Incredible Years®

Coping Cycle:
Connect Positive Thoughts, Feelings and Behaviors

The Incredible Years®

TRIGGER

Child yelling, whining, refusing, defiant, tantruming

Substitute Coping Thoughts for Upsetting Thoughts

"I can manage this! He is just testing limits."
"I can help by staying patient and in control."
"I can help her learn better behavior."
"She is still learning."

Calmer Feelings & Physiological Changes

- *reduced blood pressure*
- *calmness*
- *empathy*
- *confidence*

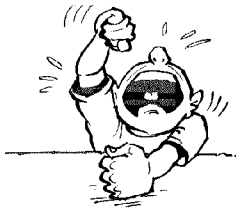
Parent Coping Behavior

- *ignore, give child time to regulate*
- *model taking deep breaths*
- *make a positive request*
- *stay consistent & calm*
- *distract & re-direct*
- *emotion coaching*

Child Impact

Child feels secure, resilient, can self-regulate

Parent Depression Cycle



TRIGGER

Child yelling, whining, refusing, defiant, tantruming

CHILD IMPACT

Sad, insecure, emotional distress

Negative & Helpless Thoughts

"My child is impossible."
"Nothing I do works."
"I can't handle it!"
"This is my fault."

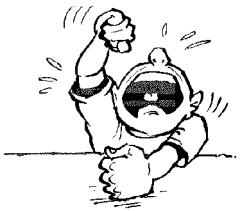
Negative Feelings

- *hopelessness*
- *sadness*
- *apathy*

Parent Behavior

- *lack of engagement*
- *emotional distance*
- *withdrawal*

Parent Anger Cycle



TRIGGER

Child yelling, whining, refusing, defiant, tantruming

Negative Thoughts

"My child is impossible."
"They're doing this on purpose."
"They're lazy. They never listen!"
"I'm losing control."

Negative Feelings & Physiological Changes

• frustration • irritation • rage
• increased blood pressure
• heart racing • headache

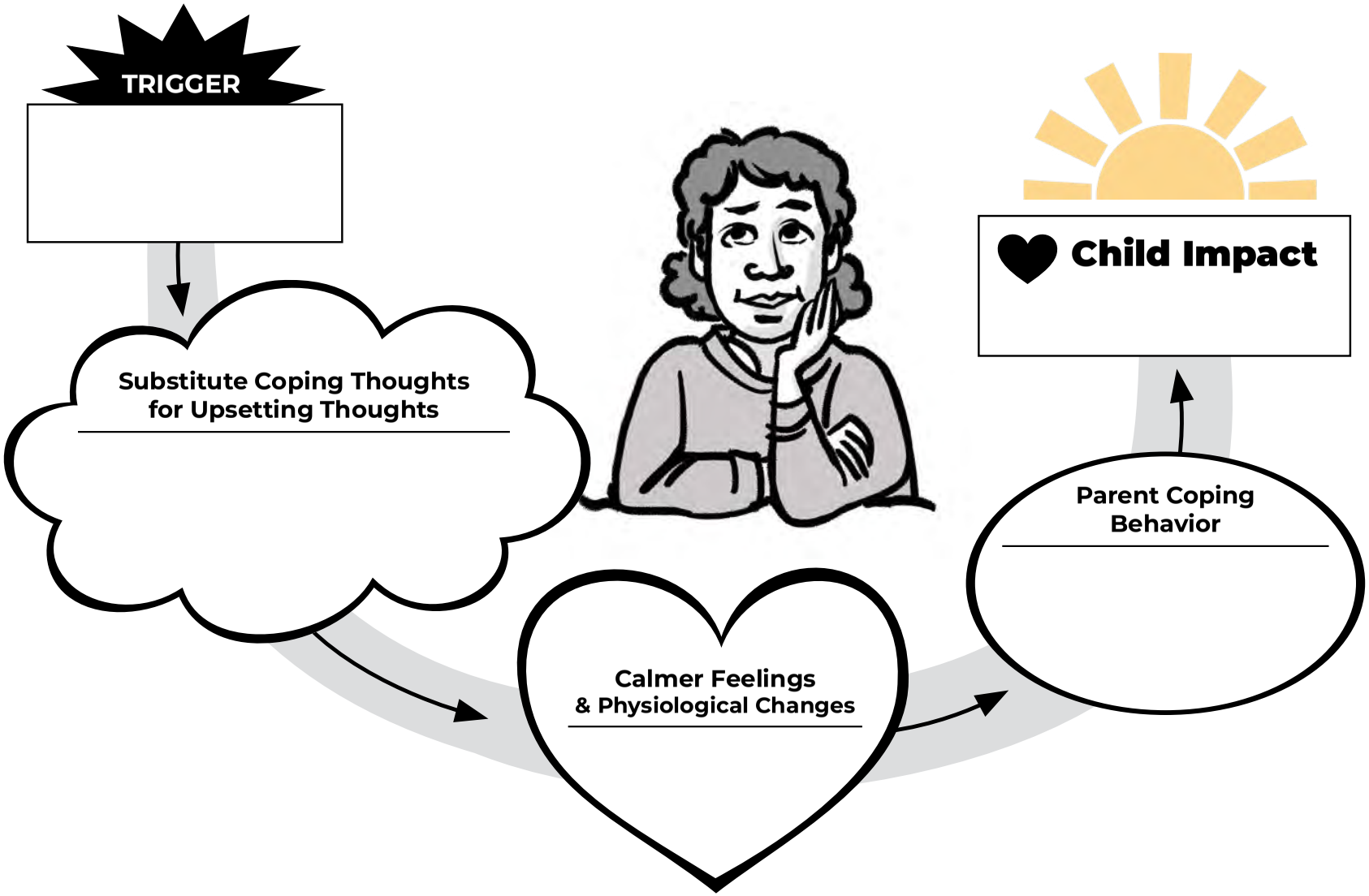
Parent Behavior

• harsh discipline
• out of control
• yelling

CHILD IMPACT

Insecure, scared, rejected, angry

Practice:
Connect Positive Thoughts, Feelings and Behaviors



1) Calm Down Procedure for Aggression

(Ages 3-6 Years)

The Incredible Years®

Child hits

Check in with child who was hit.

"I'm sorry he hit you. He made a mistake."

Command:

"You hit. You need to go to the Calm Down area"

Wait 5 seconds

Child goes to Calm Down area

3-5 minutes
No attention given

...deep breaths... I can calm down and try again.

Child calm

for last 2 mins

Parent ends time & re-engages child

"Your body is calm. You can play with your blocks"

Parent praises child's first positive behavior

"That's so friendly the way you're sharing."

2) Child Resists Going to Calm Down Area
(Ages 3–6 Years)

The Incredible Years®

Child hits

Check in with child who was hit.

"I'm sorry she hit you. She made a mistake."

Command:

"You hit. You need to go to the Calm Down area"

Wait 5 seconds

Child refuses to go to Calm Down Area

Parent gives one warning:

"You can go by yourself, or I can help you."

Child complies

No attention given for 3-5 minutes, last 2 mins child is calm

Parent ends time & re-engages child

"Your body is calm. You can play with your blocks"

Parent praises child's first positive behavior.

"That's so friendly the way you're sharing."

3) Child Refuses to Stay in Calm Down Area

(Ages 3–6 Years)

The Incredible Years®

Child leaves Calm Down area before time is over

Parent gives warning:

Loss of special privilege	OR	Alternate Space
"If you can't stay in the calm down area, you'll lose your lego time"		*"If you can't stay in the calm down area, you'll go to the calm down room."*

Child stays in Calm Down area

3-5 mins, last 2 minutes child is calm

Parent praises child's first positive behavior.

"That's so friendly the way you're sharing."

Parent ends time & re-engages child

"You are calm and can come play now"

Child leaves Calm Down Area

Parent takes child to calm down room

"You need to go the room to calm down."

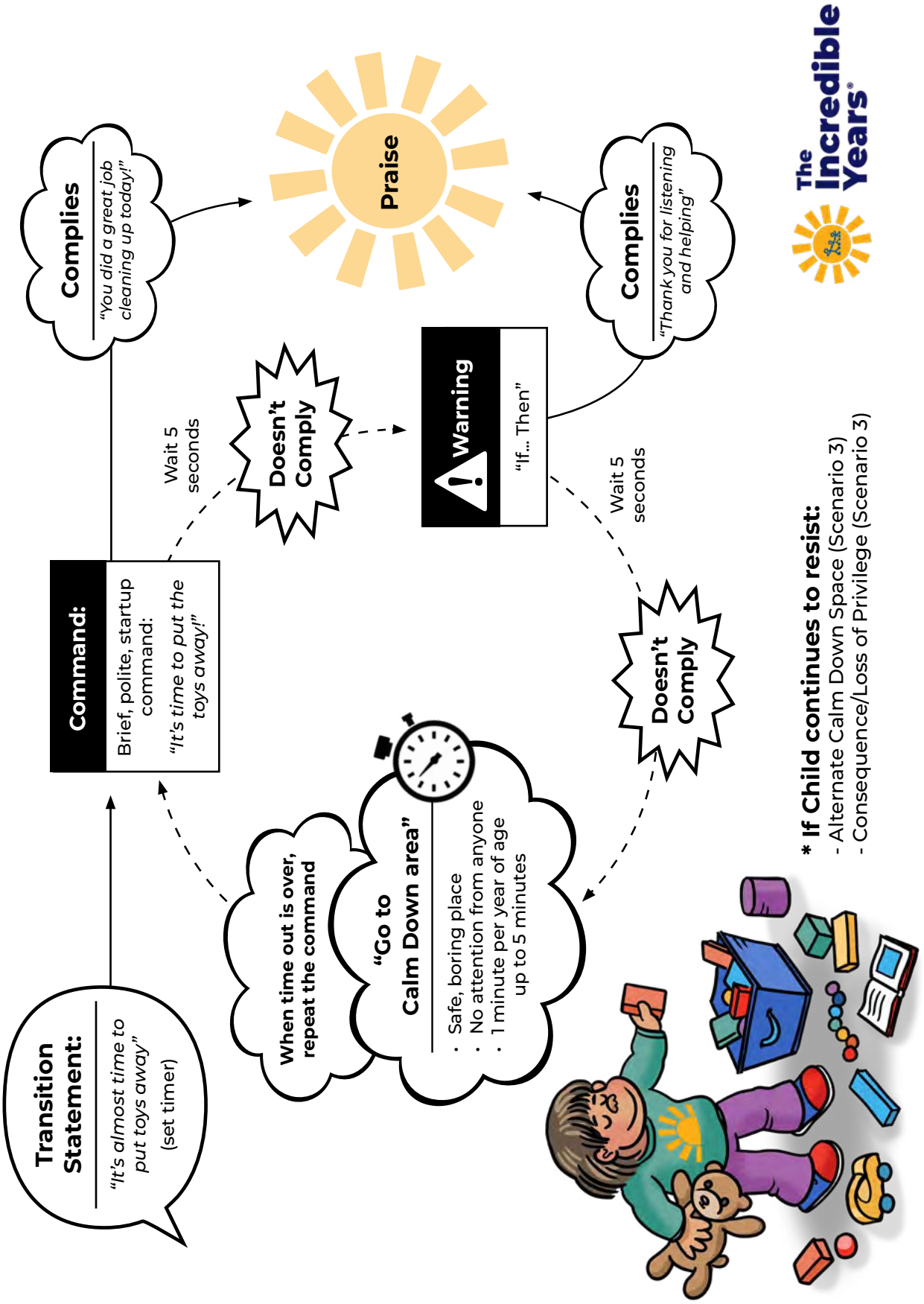
Child stays in Calm Down room

No attention given for 3-5 mins, last 2 mins child is calm

STOP

If child does not go after warning, parent follows through with consequence. Calm Down time is dropped.

4) Calm Down Procedure for Compliance Training



Hot Tips for Managing Thoughts, Feelings & Parenting Behaviors: Exploring Parent Depression & Anger and Promoting Coping Cycles

Carolyn Webster-Stratton, Ph.D.
11 July 2025

Scenario: All children at times tantrum, yell, hit, and are oppositional, defiant and irritable. These challenging behaviors may occur because they not being able to do what they want, or are tired or hungry, or have pain, or experience a change in family structure or schedule, or witness family conflict, feel rejected by peers or are lonely. How parents respond to their children's dysregulation can influence children's emotional and social development.

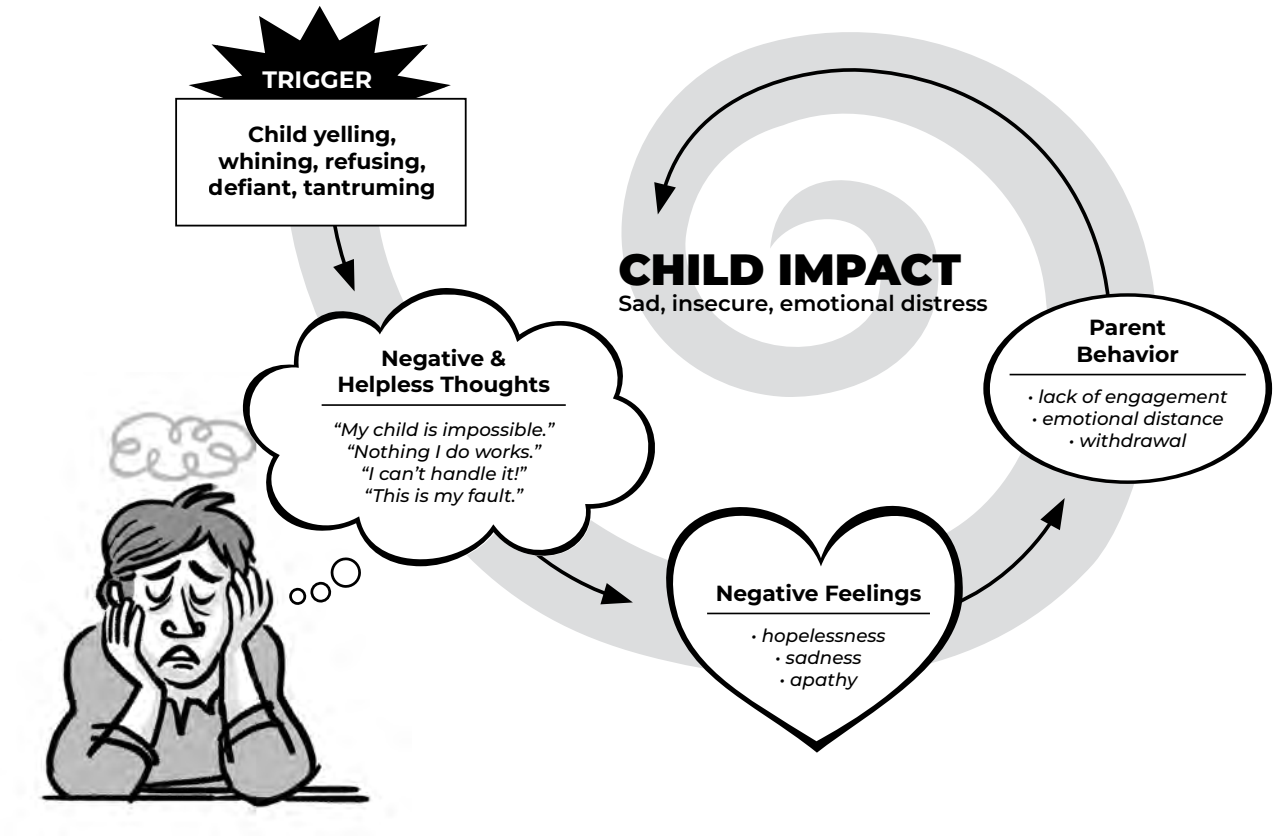
Here's a summary of parent response cycles—how depression, anger, and coping cycles are interconnected. Depending on how parents manage these cycles of emotional responses can either perpetuate negative outcomes or promote emotional resilience in children. Parents recognizing their own cycles of overreaction or avoidance can provide insights into how to break negative cycles and create healthier, more supportive and consistent parenting.

1. Depression Cycle:

- **Parent's Negative & Helpless Thoughts:** Challenging child behaviors such as those described above may cause parents to respond with negative and upsetting thoughts or beliefs about themselves or their children or both. They may think nothing they do can help their child either because they are not confident about their parenting, or they may see their child as incapable of learning. *"I can't manage this. I don't know what to do."*
- **Parent's Upsetting Feelings:** These negative and upsetting thoughts lead to feeling overwhelmed, hopeless, sad, or emotionally drained.
- **Parent's Behaviors:** As a result, the parent may lack the energy or motivation to engage with their child in a positive way. These thoughts and feelings can cause them to withdraw and disengage from parent-child interactions. This might look like reduced parent responsiveness, neglect, or a general emotional distance.

- **Child's Impact:** This parent withdrawal can create a cycle where the child feels neglected, which may increase the child's own feelings of sadness or insecurity. The child sensing the parent's depression may begin to mirror these feelings or struggle with emotional regulation, possibly leading to their own struggles with depression or low self-esteem.

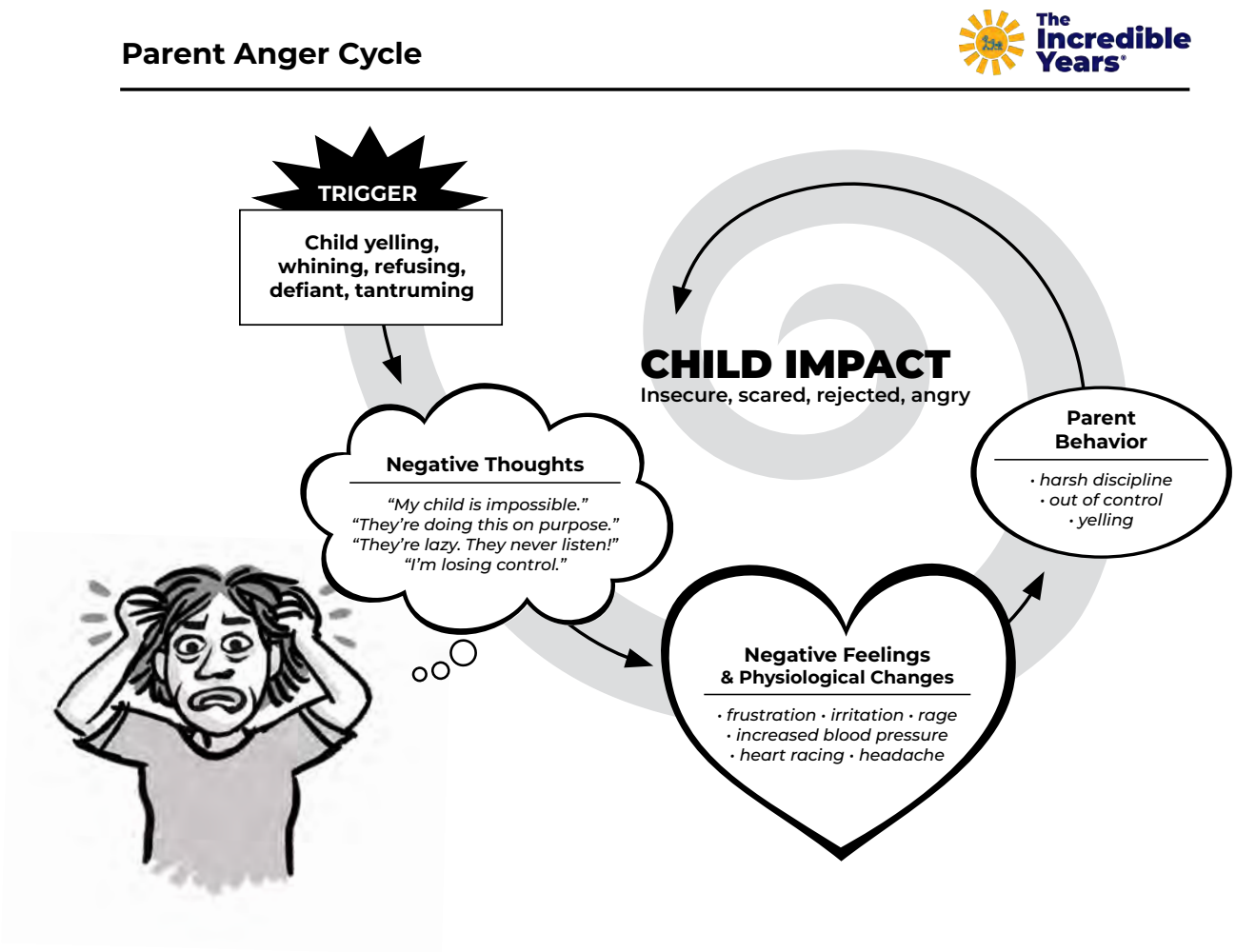
Parent Depression Cycle



2. Anger Cycle:

- **Parent's Negative Thoughts:** On the other hand, some parents perhaps having unrealistic expectations for their child may respond to the child's challenging behaviors by thinking their child is purposely misbehaving or attacking them, or deliberately not listening. *"She's impossible. A constant challenge." "I am losing control."*
- **Parent's Negative Feelings & Physiological Changes:** These angry thoughts lead to feelings of frustration, irritation, stress, or even rage. Research shows this can also lead to physiological changes such as increased blood pressure, rapid heartbeat, headache, and clenched fists.
- **Parent's Behaviors:** The parent's anger may result in harsh discipline, yelling, or punitive behaviors. The anger cycle can escalate if the parent's response is intense or frequent and unaware of how to self-regulate.

- **Child's Impact:** The child may feel scared, confused, or rejected by the parent's angry responses. This can lead to a sense of insecurity, anxiety, or even anger themselves, perpetuating the cycle of conflict and difficulty in managing emotions.

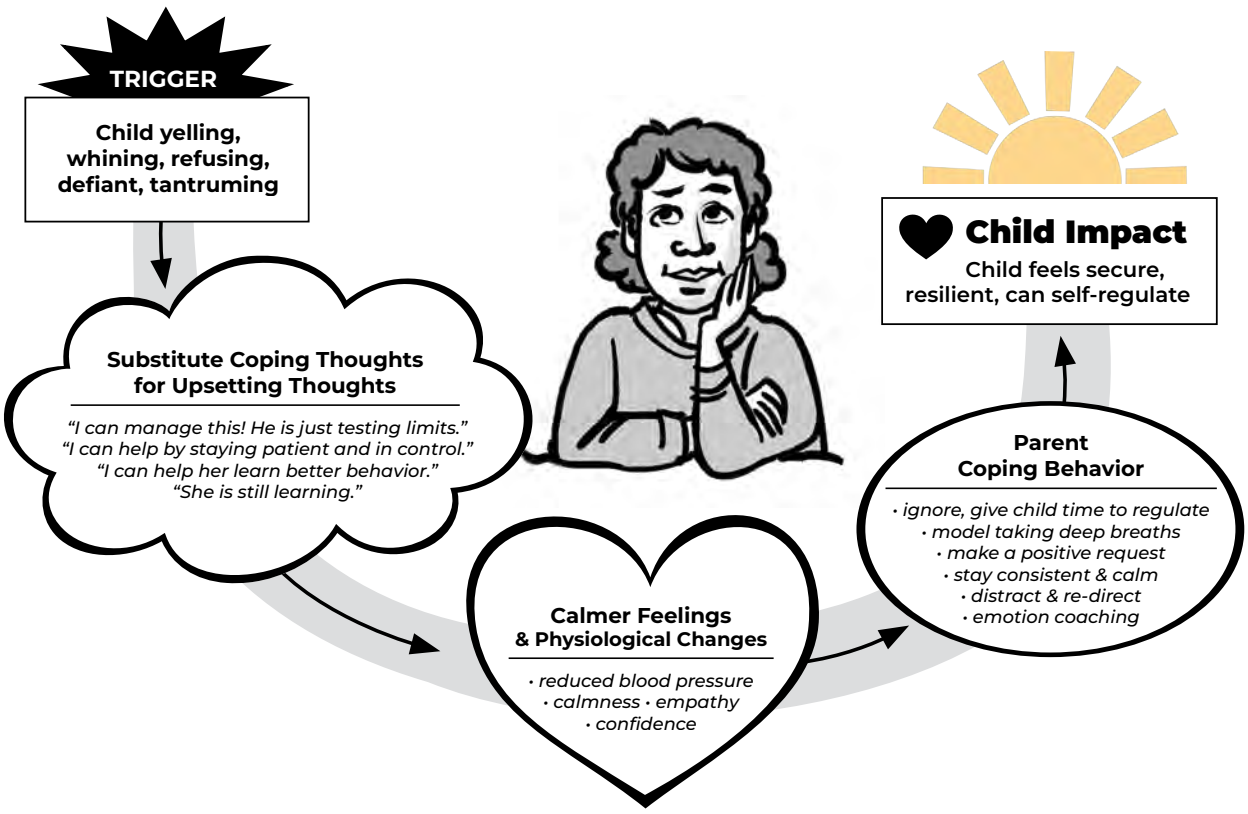


3. Coping Cycle:

- **Parent's Substitution of Positive for Negative Thoughts:** The parent recognizes their non-constructive and upsetting thought patterns and works to stop these negative thoughts and replace them with coping statements. *"I can cope. He is just testing the limits. I can help best by staying patient and in control, this will help him feel safe."* In a healthier coping cycle, the parent has thoughts that reflect problem-solving, patience, understanding and even humor at times. They recognize that children are still learning to self-regulate, and they adjust their expectations.
- **Parent's Feelings:** These more balanced thoughts lead to feelings of calmness, empathy, confidence and less stress. The parent may feel more connected to their child and able to manage challenging situations without becoming overwhelmed. *"I feel calmer and less stressed." " I love her and know what to do to help her."*

- **Parent's Coping Behaviors:** In turn, the parent demonstrates calm, consistent, and supportive parenting behaviors. They might model deep breathing and emotional regulation, ignore the child's challenging behavior and give the child space and time to calm down, provide emotion coaching, distract and redirect and set appropriate boundaries.
- **Child's Impact:** The child feels supported and understood, which promotes emotional regulation and resilience. The child learns how to cope with their own emotions through the example set by the parent, fostering positive behaviors and a sense of security.

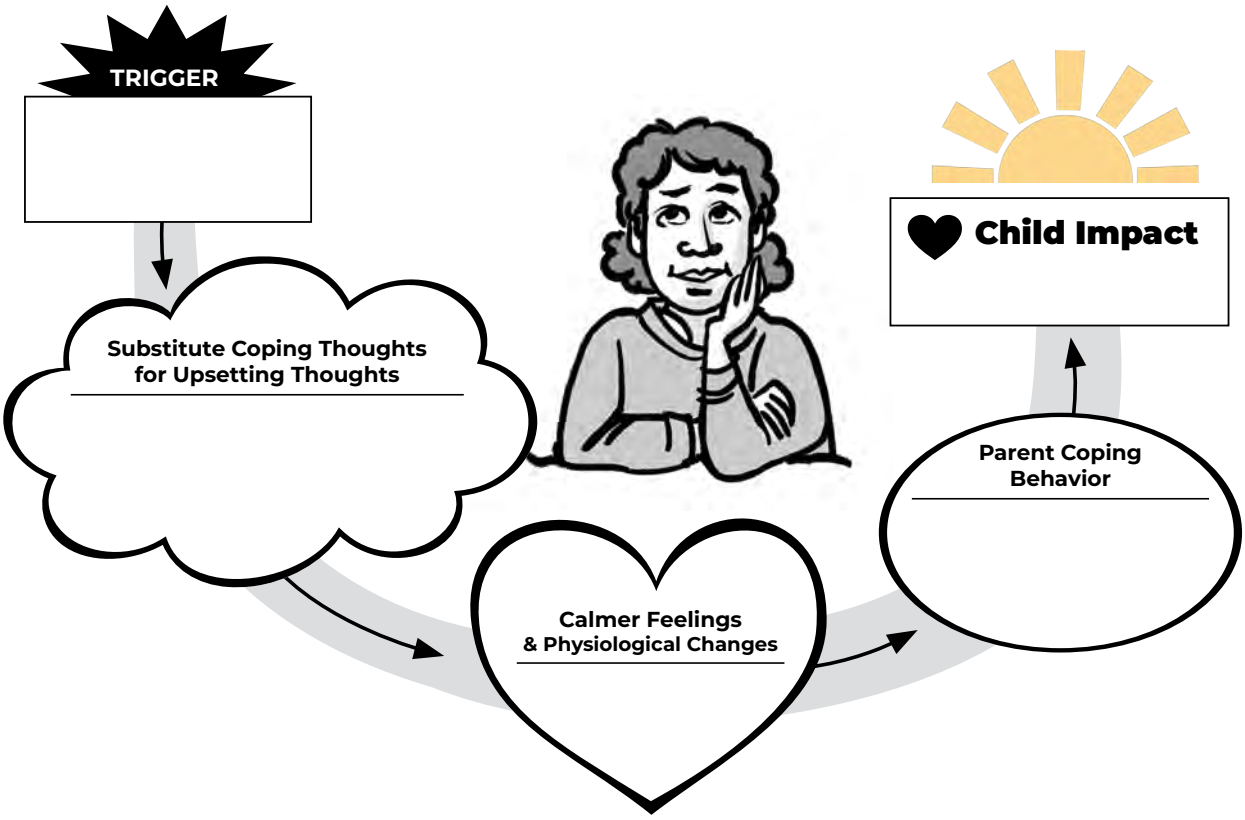
Coping Cycle:
Connect Positive Thoughts, Feelings and Behaviors



Key Takeaways:

- Negative cycles, like the depression and anger cycles, often lead to withdrawal, harsh discipline, or emotional disengagement, which can negatively impact the child's emotional development.
- In contrast, a coping cycle reflects positive problem-solving, emotional regulation, and supportive behaviors that help children feel secure and better equipped to deal with their own emotions.
- Parents' thoughts, feelings, and behaviors are interconnected, and cycles of emotional responses can either perpetuate negative outcomes or promote emotional resilience in children, depending on how parents manage these dynamics.

Practice:
Connect Positive Thoughts, Feelings and Behaviors



Understanding these thought and feeling cycles helps parents recognize patterns in their own behavior and provides insight into how they can break negative cycles and create healthier, more supportive parenting interactions for their children. Group leaders use this scenario to help parents build their own constructive and positive thoughts, to feel more confident and less stressed, and to use evidence-based parenting strategies to build their children's trust, sense of security and resilience.

2025 Incredible Years®
21st Mentor Meeting

Moving the Needle: An Integrated Multi-Level System of Delivering IY Programs

ARLICLES

BMC Health Services Research

RESEARCH

Open Access

A cost-effectiveness analysis of a universal, preventative-focused, parent and infant programme

Gráinne E. Crealey[1], Gráinne Hickey[2,3] and Sinead McGilloway[3*]

Abstract

Background This study assessed whether a relatively newly developed Parent and Infant (PIN) parenting support programme was cost-effective when compared to services as usual (SAU).

Methods The cost-effectiveness of the PIN programme versus SAU was assessed from an Irish health and social care perspective over a 24-month timeframe and within the context of a non-randomised, controlled before-and-after trial. In total, 163 parent-infant dyads were included in the study (86 intervention, 77 control). The primary outcome measure for the economic evaluation was the Parenting Sense of Competence Scale (PSOC).

Results The average cost of the PIN programme was €647 per dyad. The mean (SE) cost (including programme costs) was €7,027 (SE €1,345) compared to €4,811 (SE €593) in the control arm, generating a (non-significant) mean cost difference of €2,216 (bootstrap 95% CI -€665 to €5,096; $p=0.14$). The mean incremental cost-effectiveness of the PIN service was €614 per PSOC unit gained (bootstrap 95% CI €54 to €1,481). The probability that the PIN programme was cost-effective, was 87% at a willingness-to-pay of €1,000 per one unit change in the PSOC.

Conclusions Our findings suggest that the PIN programme was cost-effective at a relatively low willingness-to-pay threshold when compared to SAU. This study addresses a significant knowledge gap in the field of early intervention by providing important real world evidence on the implementation costs and cost-effectiveness of a universal early years parenting programme. The challenges involved in assessing the cost-effectiveness of preventative interventions for very young children and their parents are also discussed.

Trial registration ISRCTN17488830 (Date of registration: 27/11/15). This trial was retrospectively registered.

Keywords Cost-effectiveness, Early parent intervention, Universal parent support, Group-based parent training

Introduction

Inadequate care, abuse and/or neglect during infancy can undermine development and impact outcomes throughout the lifespan [1–5] while leading to increased expenditure on health, social, educational and judicial services [6–8]. Parenting support which can promote positive parenting is a growing public health and human rights priority [9]. Group-based parenting programmes delivered on a targeted basis to parents of older school going children, have been found to be effective and represent good value for money [10–15]. However, there is growing interest

*Correspondence:
Sinead McGilloway
sinead.mcgilloway@mu.ie
[1] Clinical Costing Solutions, Belfast BT15 4EB, UK
[2] Barnardos Ireland, Christchurch Sq., Dublin 8, Dublin D08DT63, Ireland
[3] Centre for Mental Health and Community Research, Maynooth University, Maynooth W23 F2H6, Co. Kildare, Ireland

in supports which are delivered to all parents. Universal parenting interventions aim to support the general population, rather than targeting a specific cohort of families [16]. Given the prevalence of sub-optimal parenting, as well as the range of outcomes on which parenting can have an influence, universal approaches may be more efficient [17]. They may also have greater reach than targeted approaches due to their wider availability. Additionally, the delivery of services and supports to all families may reduce any potential stigma associated with participation [18]. However, there remain significant gaps in our understanding of the effectiveness and cost-effectiveness of parenting interventions when implemented on a universal basis [19, 20], especially in the very earliest childhood years.

Empirical studies of universally available early parenting programmes have highlighted their potential effectiveness in improving parenting knowledge, skills and attitudes [21]. Limited findings have also suggested that universal early intervention may lead to modest, but sustained improvements in parenting during early childhood (i.e. when children are 3 years old) [22], although little is known about the longer-term effects of universal supports on parenting outcomes [23, 24]. A recent study found that a multimodal intervention which included group-based parent training delivered on a universal basis in primary care settings to parents of infants aged 1–2 months, led to improvements at 14 months, in child communication skills and fine motor development, suggesting that these supports may provide a cost-efficient means of enhancing early child development [25]. However, evidence of the impact of such parenting supports on child outcomes remains mixed [20, 22, 26]. Some studies have concluded that group-based interventions delivered in the earliest years are not cost-effective [19, 27], whilst others [28] have highlighted uncertainty in the probability of cost-effectiveness of universal parenting programmes. For example, recent research demonstrated borderline cost-effectiveness of the group-based Incredible Years Infant and Toddler programmes delivered as a universal, proportionate model for parent-infant dyads, although this was linked to effects on parent health rather than any improvements in child wellbeing [26, 29].

Evaluating the cost-effectiveness of universal early parenting supports is challenging. For example, the preventative focus of universal parenting programmes (i.e. preventing the emergence of difficulties or delays in child development), as opposed to risk/disease reduction (i.e. reducing difficulties or problem behaviour in at-risk groups), may limit the possibility of detecting large effects which can be demonstrably linked to economic gains/costs savings. Moreover, previous studies [19, 27] have explored the cost-effectiveness of universal parenting interventions only within the context of short-term follow-up periods (e.g. 6–12 months post-baseline assessments), and preventative effects may take time to emerge [30]. Service providers and policy makers who wish to develop and implement parenting supports in the earliest years, must consider several factors, including the payoff between costs and expected benefits of different programme options, the impact of the programme compared to the investment required, and the time/opportunity costs incurred for skilled health and social care professions. However, significant gaps in our knowledge exist with regard to implementation and delivery costs, potential health and social care cost savings and the cost-effectiveness of universally delivered early parenting interventions [14].

This study contributes to this debate by exploring the costs and cost-effectiveness of a universal early parenting intervention called the Parent and Infant (PIN) programme. The PIN programme is a preventative, universal, multi-component intervention which targets parents' attitudes towards their parenting role and ability to sustain responsive, sensitive parenting strategies in the early years of their child's life. Thus, this cost-effectiveness study focused on parent outcomes, particularly, their confidence and satisfaction in their parenting role.

Methods

This study considered the cost-effectiveness of the PIN programme when compared to services as usual. The PIN programme comprises 15 sessions during which parents participate in the Incredible Years Baby Programme (IYBP) and a range of complementary workshops. An overview of the PIN programme is presented in Fig. 1 with further details available on request [31].

Usual services for parent-infant dyads involve: one home visit from a Public Health Nurse (PHN) in the first 6 weeks after birth; a 2-week and 6-week check-up with a GP/hospital service; developmental check-ups with a PHN (at 3, 7 and 24 months); and free vaccinations. GP care for children under the age of eight is free in the Republic of Ireland. Breastfeeding supports and mother and baby/toddler groups are offered at a community level by public health or publicly-funded community-based services (e.g. libraries, family resource centres) and are free to access. Other services such as baby massage, baby yoga, or music classes are also available, although these are typically offered by private businesses, and parents pay to access and use them [31].

Participants were recruited to the study via public health services. Parents were eligible for inclusion if they were: (a) 16 years or older and with an infant under the age of 20 weeks; (b) willing to participate in the study; and (c) able to communicate with reasonable

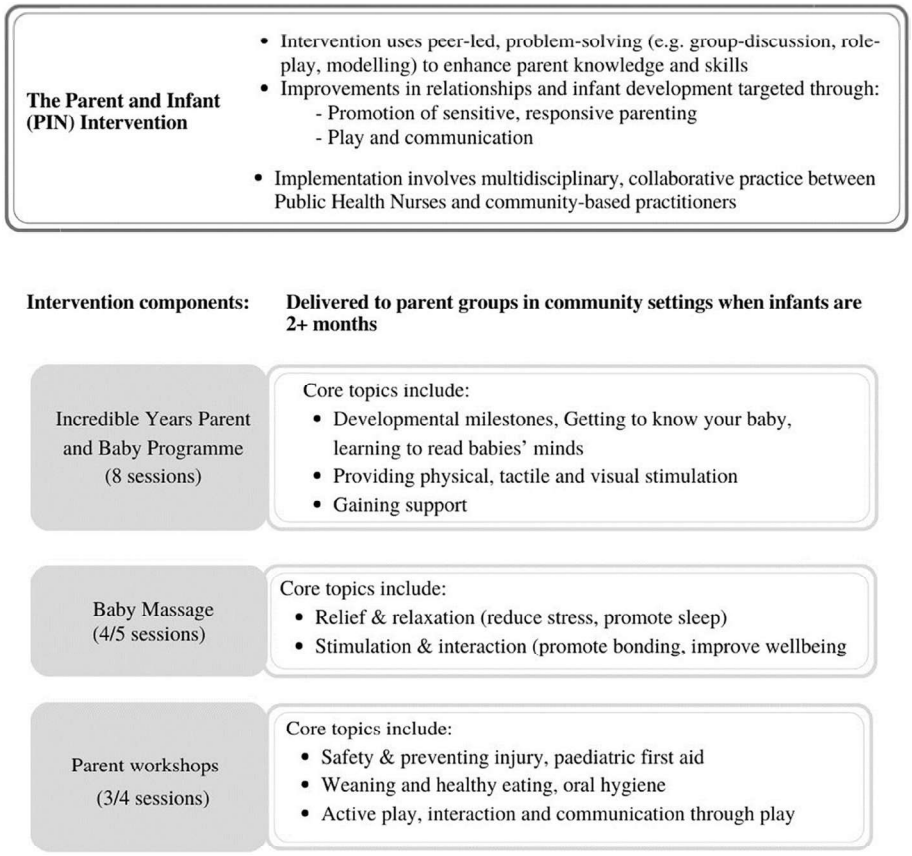


Fig. 1 Overview of the PIN programme adapted from Hickey et al., 2020 [28]

proficiency in English. Recruitment was conducted on a universal basis and screening for risks (e.g. socioeconomic disadvantage, early parenthood, lone parenthood) was not used as an inclusion/exclusion criterion. Once written informed consent was obtained, baseline assessments were conducted (when infants were aged 6 to 20 weeks old). Follow-up assessments took place when infants were aged approximately 8-, 16- and 24-months. Those in the intervention group were able to access the PIN programme one to three weeks after baseline assessments were completed. Parents in the intervention group also received usual services.

The effectiveness of the PIN programme was assessed by means of a community-based pragmatic trial using a non-randomised, quasi-experimental, controlled before-and-after study design. The cost-effectiveness analysis was undertaken alongside this trial. The perspective for the analysis was that of the Irish health and social care system over a 24-month time frame. In total, 380 parents and infants were recruited to the trial: 106 parent-infant dyads to the PIN programme and 84 dyads to services as usual (SAU) (Fig. 2).

Resource use and costs

A strategy was developed to estimate the incremental costs associated with the PIN programme compared to SAU involving the estimation of costs associated with the delivery of the programme and of wider health and social care resource use. Broader societal resource inputs (i.e. lost productivity) were not considered.

Costing the PIN programme

PIN services were provided in two sites across two counties in the East and North East of the Republic of Ireland. The programme was delivered collaboratively and involved a mix of public sector and voluntary sector community-based organisations. A focus of the economic evaluation was the assessment of the cost of delivering the PIN programme in a community setting, including the cost of programme development, training of facilitators and other related staff costs of delivering group sessions, participant monitoring activities and any follow-up/management. Other related resource use was captured prospectively using activity logs completed by programme facilitators. Staff logged time

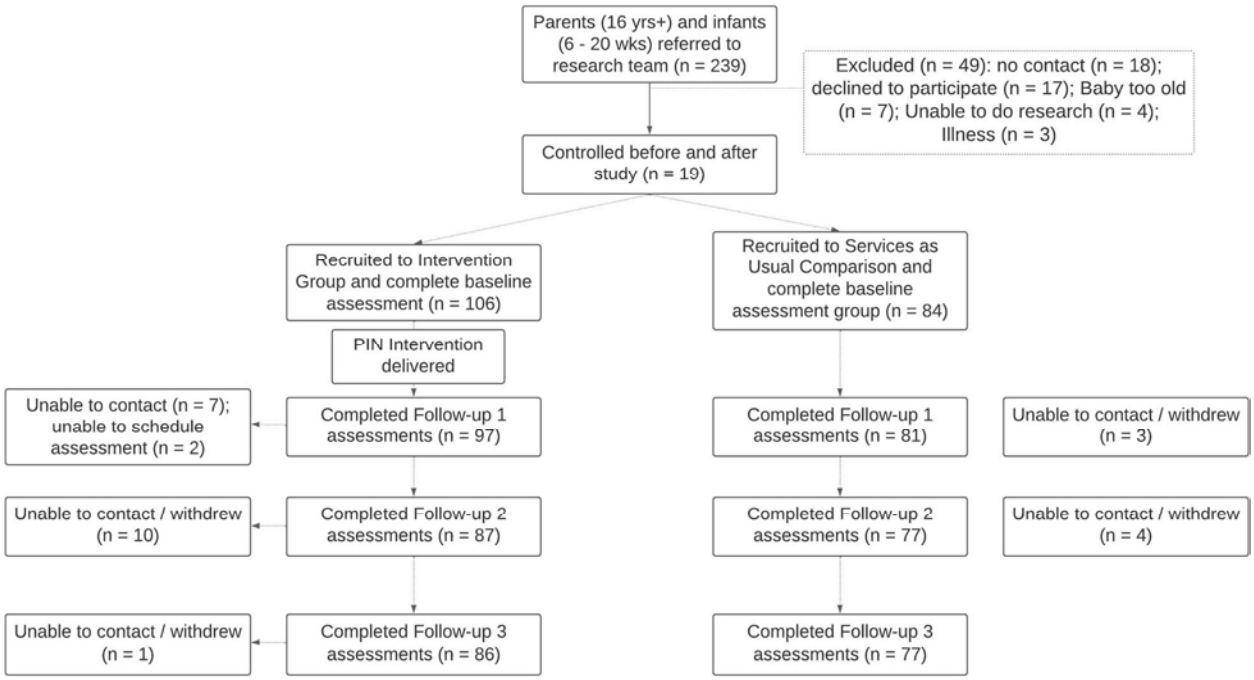


Fig. 2 Flow of participants through the trial adapted from Hickey et al., 2020 [28]

related to programme preparation and delivery, indirect administrative activities, home visits and telephone contacts, as well as PIN-related training and supervision activities. The log also captured mode, distance and time spent travelling by staff and additional expenditure such as refreshments and crèche care. Costs of venue hire were captured if applicable. Where elements of the programme were delivered by independent contractors (e.g. baby massage, return to work, weaning and paediatric first aid workshops), costs charged by that organisation were was captured. With respect to the IYBP, cost estimation was based on activity logs completed by 36 facilitators across a range of sites. The total cost of delivering the PIN programme across the two sites was used to estimate an average cost per dyad.

Collection of broader resource use data

Parental and infant/child health and social care-related resource use data were collected via a Service Utilisation Questionnaire (SUQ) based on the Client Services Receipt Inventory [32]. Data were collected on healthcare professionals' time input (GP, nurse, health visitor, social worker, psychiatric nurse, community paediatrician), counselling and mediation services used by parents, and use of hospital services (casualty, outpatient, day procedures and overnight stays). The SUQ has been used in previous research in an Irish context to explore the cost-effectiveness of group-based parenting training programmes [13].

Valuation of resource use

Resource use was valued by applying unit costs (e.g. the cost of health care professionals' time, cost of an A&E visit, etc.). Unit costs were constructed based on national guidance from the Irish Health Information and Quality Authority (HIQA) on resource valuation [33]. Costs reflect Irish unit costs at 2018–19 prices and were inflated where necessary (Table 1 & Supplementary Material – Appendix 1). Total costs were aggregated for each primary caregiver, child and parent–child dyad by multiplying the quantity of each resource item over the trial period by their respective unit costs and summating.

Measurement of effectiveness

The primary outcome used in the cost-effectiveness analysis was parenting sense of competence. Parenting self-efficacy is associated with several important outcomes, including lower parenting stress, better parental mental health and more responsive and sensitive parenting, as well as positive child adjustment [34–42].

A number of validated instruments exist which measure this outcome [43, 44]. The Parenting Sense of Competence (PSOC) scale [45] was chosen here because parent self-efficacy has been identified as an important mechanism for the effectiveness of early childhood

Table 1 Unit costs data for service use

Service	Unit cost	Source
GP[a]	€ 52.50	ESRI publication (universal GP cost in Ireland: potential cost implications)
Nurse	€ 32.75	HSE consolidated salary scales; adjusted for Employers PRSI, pension contributions and overheads
Health visitor	€ 44.21	HSE consolidated salary scales; adjusted for Employers PRSI, pension contributions and overheads
Social Worker	€ 37.98	HSE consolidated salary scales; adjusted for Employers PRSI, pension contributions and overheads
Psychiatric nurse	€ 32.87	HSE consolidated salary scales; adjusted for Employers PRSI, pension contributions and overheads
Mediation	€ 37.57	Mediation institute of Ireland; adjusted for Employers PRSI, pension contributions and overheads
Counselling	€ 60.91	Mediation institute of Ireland; adjusted for Employers PRSI, pension contributions and overheads
A&E visit ~	€ 290.00	Healthcare Pricing Office (HPO)
Outpatient consultant appointment[b]	€ 171.00	Healthcare Pricing Office (HPO)
In-patient stay (per night)	€ 897.00	Healthcare Pricing Office (HPO)
Community paediatrician	€ 36.07	*from* O'Neill et al. (2013) adjust for inflation, employers PRSI, pension contributions and overheads
Ambulance journey**	€ 89.20	*from* O'Neill et al. (2013) adjust for inflation, employers PRSI, pension contributions and overheads

[a] https://publicpolicy.ie/digest/universal-gp-care-in-ireland-potential-cost-implications/Connelly et al. 2018. Accessed on 20/12/2023.

[b] Includes specialist appointment and other

** Updated based on CCEMG-EPPI-Centre Cost Converter https://eppi.ioe.ac.uk/costconversion/

interventions [46], particularly in the context of prevention-focused interventions with parents [47]. Post-intervention improvement in parenting self-efficacy is linked to reductions in parental stress, positive changes in parenting skills and long run improvements in child cognitive and social-emotional outcomes [48, 49].

The PSOC scale is a well-established 16-item self-report measure of parental competence which has been used to assess other targeted and universal parenting programmes [26, 50, 51]. The measure assesses parent anxiety, motivation and frustration, as well as perceptions of competence, capability and problem-solving in respect of the parenting role. All 16 questions are in a Likert-scale format ranging from 'strongly agree' (1) to 'strongly disagree' (6) and a total score is generated by summing the responses to all items. A cost-utility analysis using Quality Adjusted Life Years (QALY) was not attempted as this outcome measure is not suitable for this population [52, 53].

Analyses of resource use, costs and outcome data

Resource use items were summarised by trial allocation group and follow-up period, and differences between groups were analysed using t-tests for continuous variables and chi-squared tests for categorical variables. Mean costs by cost category and mean total costs were estimated by trial allocation group for all time periods. Cost comparisons were carried out using Student's t-tests. Differences in mean total costs and their CIs were estimated. Non-parametric bootstrap estimates based on 5,000 replications were also calculated for these differences in mean costs, and their respective CIs calculated.

A complete-case analysis approach was used whereby participants were included in the analysis regardless of attendance, excluding those lost to follow up ($n=27$; 20 Intervention; 7 Comparison). Analyses were also conducted to identify any differences between those retained in the study and those who were lost to follow-up. At the outset of the trial, strategies were put in place to minimise missing cost data and a plan was developed to handle missing data to minimise potential biases. Between group differences at follow-up were assessed using Independent-samples t-tests on change scores calculated between baseline and 24 months. This approach was adopted in line with recommendations for analysis of change in non-randomised, naturalistic studies where equality at baseline is not presumed [54, 55].

Cost-effectiveness analyses

Costs and outcomes were calculated over the trial time horizon (24 months) and discounted at 4% per annum as recommended by HIQA [33]. The cost-effectiveness results were primarily expressed in terms of an incremental cost-effectiveness ratio (ICER). This was calculated as the difference in mean costs divided by the difference in mean outcomes (PSOC score) between the PIN programme and SAU. The non-parametric bootstrapping approach was used to determine the level of sampling uncertainty surrounding the mean ICER by generating 5,000 estimates of incremental costs and benefits. These were represented graphically on four-quadrant cost-effectiveness planes. Cost-effectiveness acceptability curves (CEACs), showing the probability that the PIN programme is cost-effective relative to SAU across a range of cost-effectiveness thresholds, were also

generated, based on the proportion of bootstrap replicates with positive incremental net benefits. Published estimates of willingness-to-pay for unit changes in the outcome measure are not publicly available. Consequently, statements about cost-effectiveness estimated on the basis of the PSOC measure, are based on a hypothetical range of values for the cost-effectiveness threshold ranging from €0–€1,000.

Sensitivity analyses

Comprehensive probabilistic sensitivity analyses (PSA) were undertaken to examine the impact of parameter uncertainty on the outputs of the cost-effectiveness analysis. Further sensitivity analyses were performed to assess the impact of increasing the cost of the PIN intervention (to the level observed in other similar studies) and recalculating the cost-effectiveness excluding extreme cost outliers. All analyses were undertaken in Stata v17 as per the pre-specified health economics analysis plan and reported in line with The Consolidated Health Economic Evaluation Reporting Standards 2022 [56].

Results

A total of 163 parent-infant dyads were incorporated into the economic analysis (86 in the PIN group and 77 in the SAU group). Participants were all mothers (mean age = 32 years; SD = 4.9) and almost 20% were lone parents (Table 2). Characteristics were comparable between arms except with respect to parity and infant age. Mothers in the intervention group were more likely to be primiparous, while infants in the SAU group were slightly older. Missing parent and infant baseline characteristics, resource use data and PSOC outcomes were low (0.009%). Income had a slightly elevated degree of missingness (0.02%). Participating parents attended, on average, 8.35 (SD = 5.2) programme sessions; 13% (14/106) did not attend any part of the PIN intervention. Given the low level of missing data (1.69% of data was missing for parents; 4.24% for infants), and profile of missingness (no more than one missing time period was observed for any individual out of the maximum four data collection time points), simple mean imputation (as opposed to multiple imputation) was employed. This approach was adopted to minimise bias potential [57].

Table 2 Participant Characteristics (figures are numbers (%) unless otherwise stated) adapted from Hickey et al., 2020 [28]

	Intervention (PIN) *n* = 86	Comparison (SAU) *n* = 77
Lone parent	18 (21)	14 (18)
Mother mean age (SD)	32.4 (4.9)	32.3 (5.1)
First time parent*	60 (71)	28 (36)
Ethnic minority	13 (15)	17 (22)
Unemployed	15 (18)	15 (19.5)
Low income[a]	26 (31)	21 (27)
Male infant	39 (46)	39 (51)
Infant mean age in months* (SD)	1.8 (0.8)	2.06 (0.7)

* Significant differences between intervention and comparison group assessed using Chi-Square and Independent Samples t-tests; $p < 0.05$

[a] Based on 60% of the National Median Income (an equivalised disposable income per individual of 228.13/week; CSO, 2016)

Programme costs

The total cost of delivering the PIN intervention amounted to €55,611. This comprises both capital and recurrent outlays. Capital costs are the one-time expenses that are required to set up and run the programme and may include the purchase of equipment, furniture, materials, curriculum, training, and evaluation tools. Recurrent costs are the ongoing expenses that are needed to maintain and operate the programme, such as staff salaries, rent, utilities, transportation, supplies, and maintenance. Staff costs constituted the largest cost component (accounting for 91%), with training costs, venue hire, catering, mileage accounting for the remainder. This represents a cost of €647 per parent-infant dyad on the basis of 86 parent-infant dyads having received the intervention. A high degree of variability was observed in training and group session costs between sites and providers. These were contingent on a variety of contextual factors, including number of participants per session, venue costs, training expenses and grade of staff undertaking training or delivery of the programme.

Resource use and costs

Costs associated with resource utilisation for both parent and infants, are presented for baseline and subsequent follow-up time points (Table 3). There were no statistically significant between-group differences over the entire follow-up period, with the exception of the cost of outpatient appointments for parents and casualty attendance and ambulance costs for infants (Table 4). During this period, mean (SE) costs from an Irish health and social care perspective, inclusive of the cost of the programme, were €7,027 (SE €1,345) in the intervention arm and €4,811 (SE €593) in the control arm, generating a (non-significant) mean cost difference of €2,216 (bootstrap 95% CI -€665 to €5,096; $p = 0.14$).

Cost-effectiveness of the PIN intervention

Statistically significant differences were found between the intervention and comparison groups on the primary outcome (PSOC total score); a mean (SE) PSOC total score of 0.71 (0.93) in the intervention arm and -3.20

Table 3 Resource use by group allocation, study period and resource allocation

	Baseline		Follow-up 1		Follow-up 2		Follow-up 3	
	Intervention	Comparison	Intervention	Comparison	Intervention	Comparison	Intervention	Comparison
Parent								
GP visit	1.49 (0.2)	1.1 (0.12)	1 (0.18)	1.29 (0.28)	1.92 (0.26)	1.41 (0.26	2.15 (0.33)	1.57 (0.26)
Nurse visit	1.27 (0.26)	0.84 (0.15)	0.21 (0.1)	0.18 (0.08)	0.1 (0.04)	0.03 (0.02)	0.07 (0.04)	0.08 (0.05)
Health visitor	0.21 (0.1)	0.05 (0.04)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Social worker	0 (0)	0 (0)	0.01 (0.01)	0.01 (0.01)	08 (0.54)	0 (0)	0.03 (0.02)	0 (0)
Psychiatric nurse	0 (0)	0 (0)	0 (0)	0.03 (0.03)	0 (0)	0 (0)	0 (0)	0 (0)
Counsellor	0.02 (0.02)	0.01 (0.01)	0.21 (0.15)	0.17 (0.10)	0.86 (0.56)	0.32 (0.21)	0.98 (0.66)	0.82 (0.48)
Casualty	0.08 (0.05)	0.01 (0.01)	0.04 (0.02)	0.01 (0.01)	0.08 (0.05)	0.05 (0.04)	0.03 (0.02)	0 (0)
Outpatient	0.21 (0.08)	0.13 (0.04)	0.26 (0.14)	0.1 (0.06	0.61 (0.17)	0.19 (0.08)	1 (0.4)	0.66 (0.21)
Hospital stay	0.06 (0.05)	0.04 (0.03)	0.77 (0.75)	0 (0)	1.29 (1.02)	0.38 (0.34)	0.43 (0.16)	0.19 (0.08)
Specialist	0.49 (0.12)	0.17 (0.05)	0.14 (0.07)	0.12 (0.08)	0.68 (0.42)	0.31 (0.16)	0.5 (0.13)	0.49 (0.21)
Other	0.36 (0.15)	0.12 (0.05)	0.41 (0.25)	0 (0)	0.23 (0.14)	0.14 (0.08	0.26 (0.12)	0.26 (0.13)
Infant								
GP	1.91 (0.12)	2.34 (0.16)	1.84 (0.15)	2.51 (0.3)	2.72 (0.33)	2.03 (0.29)	1.32 (0.2)	1.28 (0.16)
Nurse	2.74 (0.17)	2.6 (0.2)	1.55 (0.13)	1.84 (0.17)	1.13 (0.12)	0.89 (0.12)	0.94 (0.09)	0.62 (0.07)
Health visitor	0.31 (0.17)	0.05 (0.01)	0.01 (0.01)	0.47 (0.28)	0 (0)	0.08 (0.06)	0 (0)	0.01 (0.01)
Social worker	0.24 (0.19)	0 (0)	1.88 (1.66)	0 (0)	0.14 (0.14)	0.01 (0.01)	0.07 (0.07)	0 (0)
Paediatrician	0.22 (0.07)	0.08 (0.04)	0.07 (0.04)	0.09 (0.05)	0.04 (0.03)	0.03 (0.03)	0.02 (0.02)	0 (0)
Casualty	0.07 (0.03)	0.16 (0.08)	0.24 (0.06)	0.25 (0.06)	0.42 (0.08)	0.27 (0.07)	0.06 (0.03)	0.37 (0.14)
Outpatient	0.55 (0.09)	0.88 (0.25)	0.53 (0.12)	0.58 (0.2)	0.43 (0.11)	0.35 (0.12)	0.2 (0.06)	0.22 (0.08)
Hospital stay	0.27 (0.12)	0.34 (0.16)	0.12 (0.06)	0.66 (0.21)	0.39 (0.26)	0.33 (0.14)	0.15 (0.12)	0.13 (0.07)
Ambulance	0 (0)	0.01 (0.01)	0.04 (0.02)	0 (0)	4.4 (2.16)	0 (0)	0 (0)	0.01 (0.01)
Specialist	0.17 (0.08)	0.04 (0.02)	0.11 (0.04)	0.19 (0.09)	0.79 (0.76)	0.07 (0.04)	0 (0)	0 (0)
Other	0.48 (0.14)	0.27 (0.11)	0.19 (0.08)	0.19 (0.16)	0.04 (0.03)	0.03 (0.03)	0.11 (0.07)	0.01 (0.01)

(0.85) in the comparison arm, generated a mean difference of 3.91 (bootstrap 95% CI 1.44 to 6.38). The incremental cost-effectiveness of the PIN programme (see Table 5) was estimated at €614 per PSOC unit gained (bootstrap 95% CI €54 to €1,481). The intervention was associated with both a net positive cost and net positive effect; hence, the bootstrapped mean incremental cost effectiveness ratios (ICERs) fell largely in the north-east quadrant (Fig. 3). The cost-effectiveness acceptability curve (CEAC) (Fig. 4) indicates that, at a willingness-to-pay of €1,000 per one unit change in PSOC, the probability that the PIN programme was cost-effective was 87%.

Sensitivity and subgroup analyses

One-way deterministic sensitivity analysis, exploring the impact on cost-effectiveness of, for example, poor attendance at PIN sessions or increased cost of venues or category of staff, were not undertaken separately as such analyses do not take account of any correlations and non-linearities in the model. Other studies have reported higher parenting programme delivery costs; therefore, we explored the impact on cost-effectiveness associated with a doubling of delivery costs (from €647 to €1,294). This arbitrary assumption resulted in a mean incremental cost-effectiveness of €775 per PSOC unit gained (bootstrap 95% CI €188 to €1,735) and a 77% probability that the PIN programme was cost-effective at a willingness to pay of €1,000 per one unit change in PSOC. In the treatment group, two extreme outliers were observed (greater than €80,000) associated with extended hospital stays. An arbitrary capping of these values at €40,000 resulted in an incremental cost-effectiveness of €343 per PSOC unit gained (bootstrap 95% CI -€38 to €867) and a 99% probability that the PIN programme was cost-effective at a willingness to pay of €1,000 per one unit change in PSOC.

Discussion

Our findings suggest that the PIN programme was cost-effective at a relatively low willingness-to-pay threshold when compared to SAU and using within trial data collected in a real-world setting; this cost-effectiveness remained unchanged when subjected to sensitivity analysis. The results show significant differences between parents who received the PIN programme and those who received SAU, suggesting that the programme led to

Table 4 Cost-effectiveness acceptability curve

	Group allocation, mean (SE) cost (€)				
Cost category by period	**Intervention**	**Control**	**mean difference**	***p*-value**	**95% CI (€)**
Parent					
GP visit	344.10 (31.90)	275.98 (34.79)	68.12	0.15	-24.96 to 161.20
Nurse visit	53.27 (9.52)	38.06 (6.24)	15.21	0.19	-7.87 to 38.28
Health visitor	9.59 (4.42)	2.39 (1.68)	7.20	0.15	-2.57 to 16.97
Social worker	31.12 (21.24)	0.51 (0.51)	30.60	0.18	-13.86 to 75.06
Psychiatric nurse	0 (0)	0.85 (0.85)	-0.85	0.29	-2.46 to 0.75
Counsellor	129.16 (68.95)	83.13 (35.44)	46.02	0.57	-112.68 to 204.73
Casualty	69.88 (22.56)	23.51 (13.39)	46.37	0.09	-7.04 to 99.77
Outpatient	364.66 (79.51)	177.93 (42.45)	186.73	0.05	2.46 to 371.00
Hospital stay	1442.01 (745.20)	565.23 (327.12)	876.78	0.30	-776.49 to 2530.05
Specialist	309.04 (94.55)	191.80 (54.86)	117.24	0.30	-105.51 to 339.99
Other	220.45 (63.45)	90.12 (27.38)	130.32	0.07	-11.94 to 272.58
Infant					
GP visit	407.36 (27.93)	427.09 (32.94)	-19.73	0.65	-104.60 to 65.14
Nurse visit	207.96 (8.68)	198.71 (9.95)	9.25	0.48	-16.74 to 35.24
Health visitor	14.74 (8.03)	28.08 (13.30)	-13.34	0.38	-43.45 to 16.77
Social worker	26.73 (25.34)	0.51 (0.51)	26.21	0.32	-26.19 to 78.62
Paediatrician	13.36 (3.26)	6.82 (2.47)	6.54	0.12	-1.66 to 14.73
Specialist	192.11 (135.60)	67.93 (22.06)	124.18	0.39	-161.13 to 409.49
Casualty	657.09 (86.12)	986.00 (181.35)	-328.91	0.09	-711.57 to 53.75
Outpatient	303.53 (48.10)	366.43 (81.48)	-62.90	0.49	-244.55 to 118.74
Hospital stay	732.10 (278.98)	1338.30 (299.61)	-1,414.00	0.14	-1414.00 to 201.60
Ambulance	7.81 (3.62)	0 (0)	7.81	0.05	0.16 to 15.45
Other	122.44 (29.62)	92.63 (39.14)	29.82	0.54	-65.94 to 125.58

Table 5 Sample statistics and incremental cost-effectiveness results

	Treatment group (*n* = 86)	**Control group (*n* = 77)**	**Difference**	**95% confidence interval**
Effect (PSOC)				
Mean	0.71	-3.20	3.91	1.44 to 6.38
SE of mean	0.93	0.85		
Cost				
Mean	€7,027	€4,811	€2,216	-€665 to €5096
SE of mean	€1,345	€593		
Cost and effect				
Covariance	2,080	3,841	79	
Correlation	0.02	0.11	0.04	

positive outcomes in terms of parenting attitudes; conversely, those who received SAU experienced a diminished sense of competency over time. Recent research has suggested that parenting self-efficacy declines as children become older [58], although a more mixed picture in this regard, is reported in previous work [59]. Here, there were no significant cost differences observed between groups over time. Furthermore, at a willingness-to-pay of €1,000 per one unit change in the PSOC, the probability that the PIN programme was cost-effective, was high. Overall, parenting sense of competence is a frequently targeted change mechanism in early parenting interventions, but there is only a limited understanding, to date, of how parenting self-efficacy evolves as children grow and parents adapt to new parenting tasks. Further longitudinal studies are needed to assess the association

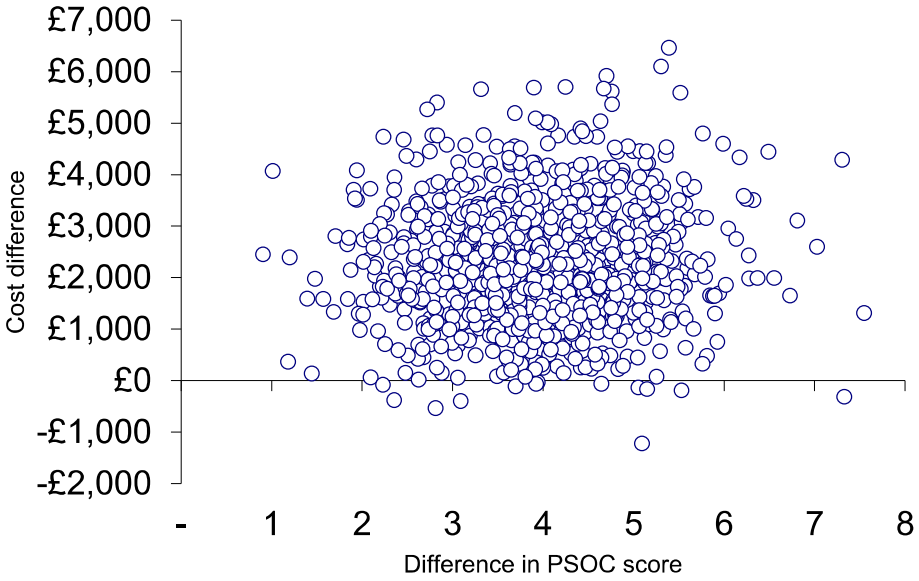


Fig. 3 Cost-effectiveness plane

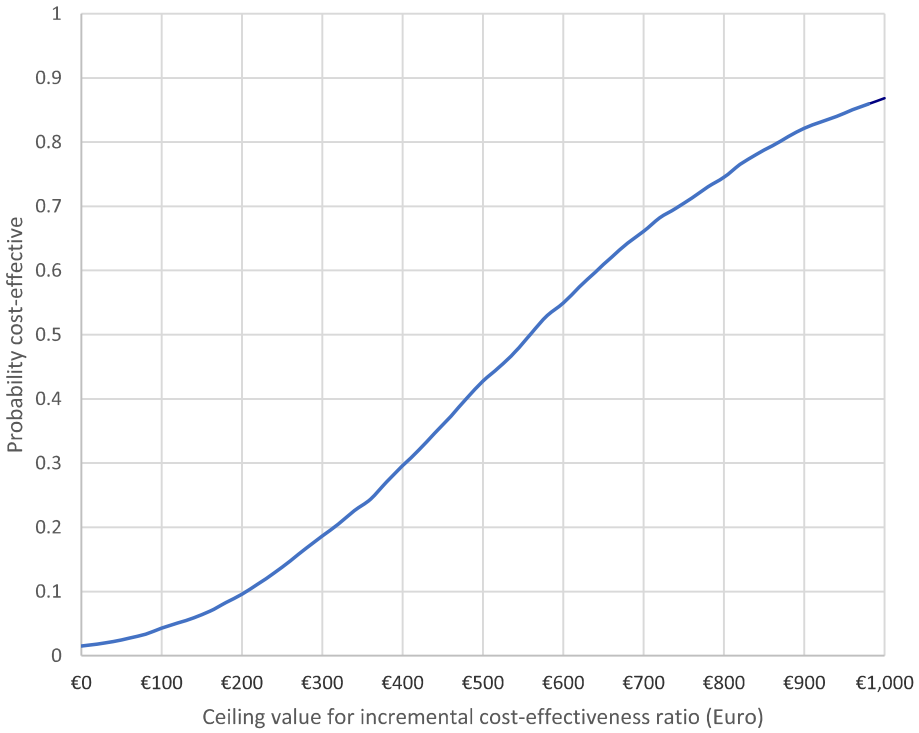


Fig. 4 Group allocation, mean (SE) cost (€)

between child age and parenting self-efficacy, as well as its role in the longer-term outcomes of early parenting interventions [44].

When interpreting the findings, the challenges involved in assessing the cost-effectiveness of preventative interventions in this population should be kept in mind [15, 29]. Although QALY is a widely used outcome measure for assessing the cost-effectiveness of health interventions, it was not used here as it assumes that health-related quality of life can be measured and valued on a single scale ranging from 0 (death) to 1 (full health). However, this may not capture the complexity and

diversity of children's health and well-being, which may depend on factors such as developmental stage, cognitive abilities, social relationships, and environmental context. Moreover, the QALY may not reflect the preferences and values of children and their families, who may have different perspectives on what constitutes a good outcome. Instruments used to measure health-related quality of life may also not be valid or reliable for children, especially for very young or pre-verbal children who cannot self-report their health status. Furthermore, these instruments may not be sensitive to the specific attributes and domains that are relevant for children's health and well-being, such as growth, development, learning, play, and participation [53].

The well-established cost-utility framework used to assess clinical interventions is also less successful when applied to preventative interventions where costs and outcomes can fall across multiple sectors and intervention benefits may extend well beyond the time horizon of the study. Moreover, other less tangible benefits of early intervention, such as early identification of difficulties, or signposting of families to additional services and supports, are not explicitly quantified and valued within the current evaluative framework. Additionally, no explicit societal willingness-to-pay thresholds exist for outcomes commonly used to assess early years interventions, leading to greater difficulty in judging and comparing programmes. One possible approach to overcoming these challenges and capturing the cost effectiveness of early years interventions that have outcomes across multiple sectors, is to use a combination of cost–consequences analysis and cost–benefit analysis. Cost–consequences analysis presents the costs and outcomes of an intervention without aggregating or valuing them. Cost–benefit analysis, on the other hand, attempts to assign monetary values to all the costs and benefits of an intervention, including non-health and community benefits. This combined approach could help decision-makers choose interventions that maximise health and social benefits given the resources available and ensure their fair distribution across the population.

Gardner and colleagues [60] reported costs 'as provided' for IY parenting interventions of between £1,496 and £1,792 (based on 5 randomised trials). The magnitude of costs in our study were significantly lower, but comparable to those of the E-SEE trial which explored the cost-effectiveness of a proportionate parenting programme and reported intervention costs of £458.50 per dyad, and an ICER of £26,312/QALY [29]. The lower costs reported here, are likely due to the commissioning of components to voluntary sector organisations which were billed at a cost per component delivery irrespective of programme attendance, as well as the leveraging of resources available to participating organisations (e.g. health centres/community centres were used to deliver programmes to minimise venue hire costs where possible). Our results offer additional support to previous findings which suggest that course attendance significantly contributes to average programme costs [61] and that staff expenses constitute the largest cost component of delivering group sessions [13].

Comparison to previous research and study strengths

A relatively small number of evaluations of parenting programmes have incorporated an assessment of costs and/or cost-effectiveness, most of which have been conducted with targeted programmes for parents of school-going children [62–65]. Ulfsdotter and colleagues [28] explored the effectiveness and cost-effectiveness of a universal group-based programme, but with parents of older children (3–12 years). A small number of other studies have focused on younger children (0–2 years) [19, 25, 27, 29, 66]. Thus, this study addresses an important knowledge gap and provides important practical information for policy makers who wish to commission services aimed at enhancing parental competency.

Recent studies highlight the challenge of determining the cost-effectiveness of early intervention programmes [28, 29]. Despite a growing commitment to children's rights and the development of prevention-focused policies, the wellbeing of children and families have been negatively impacted by austerity, COVID-19 and cost of living increases [67–69]. Strengthening social, emotional and mental health functioning requires complex, interagency approaches, but these kinds of interventions can be difficult to cost within the traditional cost-effectiveness framework. Recent calls have been made to move beyond market-centred approaches towards more rights-based and creative, open-minded collaborations between health economists, researchers, service providers and policy makers [70]. Overall, there remains very little robust evidence on the cost-effectiveness of children's services, while the appropriateness of traditional cost-effectiveness approaches in the context of complex early interventions in the primary health and social care sector, requires further consideration [71].

Study limitations

Our study has a number of limitations. First, the primary outcome measure used in the cost-effectiveness analysis, was a measure of parental competence as opposed to a child development outcome. However, parents were the primary target of the intervention, while parental self-efficacy is an important targeted outcome of parenting interventions and is associated with a number of positive parent and child outcomes, including better parenting

skills, as well as positive parent and child functioning [43, 59]. Second, economic evaluation of public health interventions is complex and presents a range of challenges for health economists. The outcome of choice for the economic evaluation of clinical interventions is typically the quality adjusted life year (QALY) where for example in the UK, a societal willingness-to-pay threshold of between £20,000-£30,000 per QALY gained is applied. No such threshold exists for the PSOC (or other measures frequently used in the assessment of early years interventions); hence funders must determine, within their current budget, whether a €1,000 per unit increase in PSOC is a worthy investment, and whether this investment should be targeted at those considered to have greater parenting risks.

Third, randomised controlled trials (RCTs) are considered to be the gold standard for causal inference, but under certain conditions, quasi-experimental designs that lack random assignment have also been shown to produce credible results [72]. Nevertheless, we cannot rule out that this design may have resulted in response bias, although an RCT was precluded by ethical and practical concerns expressed by participating organisations [31]. Fourth, our results are based on a limited costing perspective and relate only to the duration of the study which may underestimate societal impacts. Costs relating to the educational sector, justice and voluntary sectors are not included. If results are to be used for decision-making, the implications of such downstream costs should be considered. Fifth, the data here involved parent-only reports and relied on recall of service utilisation.

Sixth, engagement and retention were relatively low and study participants were all self-referred. There were more first-time parents in the intervention group; however, there were no differences in baseline PSOC scores between first time mothers and those with additional children, although previous literature has demonstrated inconsistent effects of parity on parental self-efficacy [73]. Despite these limitations, our study represents an important contribution to the little existing evidence and knowledge on the cost-effectiveness of universal parenting programmes delivered in real-life settings and especially in the crucial earliest years.

Conclusion

This study provides evidence for the potential cost-effectiveness of a group-based early parenting intervention delivered on a universal basis in primary health care and community-based settings. The findings provide important information for practitioners and policy makers in this area. Overall, there remains very little evidence regarding the cost-effectiveness of early parenting interventions, and methodological limitations in this area remain a considerable challenge. Much more research is needed in this area, including economic evaluations, in order to enhance the implementation of high-quality programmes that best meet the needs of families and young infants, and to ensure that they offer the most efficient use of available resources. Despite the attractiveness of universal interventions as a means of reaching larger numbers of families and removing the stigma associated with targeted interventions, there remains limited evidence for the effectiveness and cost effectiveness of universal prevention as a public health instrument [74]. Thus, a need for further research and particularly large-scale high quality trials, is indicated. Further consideration of how best to assess the cost-effectiveness of preventative parenting interventions implemented in the earliest years, is also needed.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12913-023-10492-w.

Additional file 1: Appendix 1. Irish Health Information and Quality Authority (HIQA) resource valuation guidelines.

Acknowledgements

We would like to thank all participants who took part in this research, as well as the service providers who delivered the PIN program and supported the research, including Archways, the Blue Skies Initiative, the Genesis Programme, Deansrath Family Resource Centre and Public Health Nursing services. We also gratefully acknowledge the help and expertise of our Programme Management Committee, Prof Michael Donnelly, Prof Ciaran O'Neill, Prof Brian Taylor and Dr Chris Cardwell, as well as our Scientific Advisory Committee, Prof Nina Biehal, Prof Vivette Glover and Prof Judy Hutchings.

Authors' contributions

GC conducted the analysis, prepared Tables 1, 3, 4 and 5 as well as Figs. 3 and 4 and contributed to the main manuscript text. GH wrote the main manuscipt text and prepared Figs. 1 and 2 and Table 2. SMcG designed the research, was the principal investigator and contributed to the main manuscript text. All authors reviewed the manuscript.

Funding

This work was supported through the Collaborative Applied Research Grants scheme (Grant No: CARG-2012–17) of the Health Research Board (Ireland).

Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available due to lack of participant consent but are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from Maynooth University Social Research Ethics Sub-Committee and the Health Service Executive (HSE) North East Area Research Ethics Committee. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Written informed consent was obtained from all participants in the study.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

Received: 29 November 2022 Accepted: 18 December 2023
Published online: 08 February 2024

References

1. Belsky J, Beaver KM. Cumulative-genetic plasticity, parenting and adolescent self-regulation. JCCP. 2011;52:619–26.
2. Banella FE, Tronick E. Mutual regulation and unique forms of implicit relational knowing. In: Apter, G., Devouche, E., Gratier, M. (eds) Early Interaction and Developmental Psychopathology. Springer, Cham. https://doi.org/10.1007/978-3-030-04769-6_3.
3. Peckins MK, Roberts AG, Hein TC, Hyde LW, Mitchell C, Brooks-Gunn J, Lopez-Duran NL. Violence exposure and social deprivation is associated with cortisol reactivity in urban adolescents. Psychoneuroendocrinology. 2020;111:104426.
4. Hein TC, Monk CS. Research Review: Neural response to threat in children, adolescents, and adults after child maltreatment–a quantitative meta-analysis. JCPP. 2017;58:222–30.
5. Kaul D, Schwab SG, Mechawar N, Matosin N. How stress physically reshapes the brain: Impact on brain cell shapes, numbers and connections in psychiatric disorders. Neurosci Biobehav Rev. 2021;124:193–215.
6. Lorber MF, Egeland B. Parenting and infant difficulty. Child Dev. 2011;82:2006–20.
7. Bellis MA, Hardcastle K, Ford K, Hughes K, Ashton K, Quigg Z, Butler N. Does continuous trusted adult support in childhood impart life-course resilience against adverse childhood experiences-a retrospective study on adult health-harming behaviours and mental well-being. BMC Psychiatry. 2017;17:1–12.
8. Heckman JJ, Corbin CO. Capabilities and skills. J Hum Dev Cap. 2016;17:342–59.
9. Britto PR, Lye SJ, Proulx K, Yousafzai AK, Matthews SG, Vaivada T, Perez-Escamilla R, Rao N, Ip P, Fernald LCH, MacMillan H, Hanson M, Wachs TD, Yao H, Yoshikawa H, Cerezo A, Leckman JF, Bhutta ZA. Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee. Nurturing care: promoting early childhood development. Lancet. 2017;389(10064):91–102. https://doi.org/10.1016/S0140-6736(16)31390-3. Epub 2016 Oct 4.
10. Charles JM, Bywater T, Edwards RT. Parenting interventions: a systematic review of the economic evidence. Child Care Health Dev. 2011;37:462–74.
11. Duncan KM, MacGillivray S, Renfrew MJ. Costs and savings of parenting interventions: results of a systematic review. Child Care Health Dev. 2017;43:797–811.
12. McGilloway S, NiMhaille G, Bywater T, Leckey Y, et al. Reducing child conduct disordered behaviour and improving parent mental health in disadvantaged families: a 12-month follow-up and cost analysis of a parenting intervention. ECAP. 2014;23:783–94.
13. O'Neill D, McGilloway S, Donnelly M, Bywater T, Kelly P. A cost-effectiveness analysis of the incredible years parenting programme in reducing childhood health inequalities. Eur J Health Econ. 2013;14:85–94.
14. Sampaio F, Nystrand C, Feldman I, Mihalopoulos C. Evidence for investing in parenting interventions aiming to improve child health: a systematic review of economic evaluations. Eur Child Adolesc Psychiatry. 2022. https://doi.org/10.1007/s00787-022-01969-w. Epub ahead of print.
15. Stevens M. The cost-effectiveness of UK parenting programmes for preventing children's behaviour problems–a review of the evidence. Child Fam Soc Work. 2014;19:109–18.
16. Trillingsgaard T, Maimburg RD, Simonsen M. The Family Startup Program: study protocol for a randomized controlled trial of a universal group-based parenting support program. BMC Public Health. 2015;15(1):1.
17. Cullen SM, Cullen MA, Lindsay G. Universal parenting programme provision in England; barriers to parent engagement in the CAN parent trial, 2012–2014. Child Soc. 2016;30(1):71–81.
18. Lindsay G, Totsika V. The effectiveness of universal parenting programmes: The CANparent trial. BMC Psych. 2017;5:35.
19. Simkiss DE, Snooks HA, Stallard N, Kimani PK, Sewell B, et al. Effectiveness and cost-effectiveness of a universal parenting skills programme in deprived communities: multicentre randomised controlled trial. BMJ Open. 2013;3:e002851.
20. Hurt L, Paranjothy S, Lucas PJ, Watson D, Mann M, et al. Interventions that enhance health services for parents and infants to improve child development and social and emotional well-being in high income countries: A systematic review. BMJ Open. 2018;8:e014899. https://doi.org/10.1136/bmjopen-2016-014899.
21. Hiscock H, Bayer JK, Price A, Ukoumunne OC, Rogers S, Wake M. Universal parenting programme to prevent early childhood behavioural problems: cluster randomized trial. BMJ. 2008;336:318–21.
22. Bayer JK, Hiscock H, Ukoumunne OC, Scalzo K, Wake M. Three-year old outcomes of a brief universal parenting intervention to prevent behavior problems: randomized controlled trial. Arc Dis Child. 2010;95:187-.
23. Pontoppidan M, Klest SK, Patras J, Rayce SB. Effects of universally offered parenting interventions for parents with infants: a systematic review. BMJ Open. 2016;6:e011706.
24. Barlow J, Parsons J, Stewart-Brown S. Preventing emotional and behavioural problems: the effectiveness of parenting programmes with children less than 3 years of age. Child Care Health Dev. 2005;31(1):33–42.
25. Shi H, Li X, Fang H, Zhang J, Wang X. The effectiveness and cost-effectiveness of a parenting intervention integrated with primary health care on early childhood development: a cluster-randomized controlled trial. Prev Sci. 2020;21:661–71.
26. Bywater T, Berry V, Blower S, Bursnall M, Cox E, et al. A randomized controlled trial of a proportionate universal parenting program delivery model (E-SEE Steps) to enhance child social-emotional wellbeing. PloS One. 2022;17:e0265200.
27. Barnes J, Stuart J, Allen E, Petrou S, Sturgess J, Barlow J, Macdonald G, Spiby H, Aistrop D, Melhuish E, Kim SW, Elbourne D. Randomized controlled trial and economic evaluation of nurse-led group support for young mothers during pregnancy and the first year postpartum versus usual care. Trials. 2017;18(1):508. https://doi.org/10.1186/s13063-017-2259-y.
28. Ulfsdotter M, Lindberg L, Månsdotter A. A cost-effectiveness analysis of the Swedish universal parenting program all children in focus. PLoS One. 2015;10:e0145201.
29. Cox E, Walker S, Blower S, Sampaio F, Bywater T, Richardson G. The cost-effectiveness of a proportionate parenting programme for primary caregivers and their child: an economic evaluation using evidence from the E-SEE Trial. BMC Health Serv Res. 2022;22:1–10.
30. van Aar J, Leijten P, de Castro BO, Overbeek G. Sustained, fade-out or sleeper effects? A systematic review and meta-analysis of parenting interventions for disruptive child behavior. Clin Psych Rev. 2017;51:153–63.
31. Hickey G, McGilloway S, Leckey Y, Leavy S, Stokes A, O'Connor S, Donnelly M, Bywater T. Exploring the potential utility and impact of a universal, multicomponent early parenting intervention through a community-based controlled trial. Child Youth Serv Rev. 2020:118. https://doi.org/10.1016/j.childyouth.2020.105458.
32. Beecham J, Knap M. Costing psychiatric interventions. In: Thornicroft G, Brewin C, Wingm J, editors. Measuring mental health needs. London: Gaskill; 1992. p. 179–90.
33. Health Information and Quality Authority. Guidelines for the economic evaluation of health technologies in Ireland. 2020. https://www.hiqa.ie/reports-and-publications/health-technology-assessment/guide-health-technology-assessment-hiqa.
34. Albanese AM, Russo GR, Geller PA. The role of parental self-efficacy in parent and child well-being: A systematic review of associated outcomes. Child Care Health Dev. 2019;45:333–63.
35. Ayala-Nunes L, Lemos I, Nunes C. Parenting stress predictors in mothers of families at psychosocial risk. Universitas Psychologica. 2014;13:529–39.
36. Begle AM, Dumas JE. Child and parental outcomes following involvement in a preventive intervention: Efficacy of the PACE program. J Prim Prev. 2011;32:67–81.
37. Bloomfield L, Kendall S. Parenting self-efficacy, parenting stress and child behaviour before and after a parenting programme. Prim Health Care Res Dev. 2012;13:364–72.

38. Coleman PK, Karraker KH. Parenting self-efficacy among mothers of school-age children: Conceptualization, measurement, and correlates. Fam Relat. 2000;49:13–24.
39. Jones TL, Prinz RJ. Potential roles of parental self-efficacy in parent and child adjustment: A review. Clin Psych Rev. 2005;25:341–63.
40. Law KH, Dimmock J, Guelfi KJ, Nguyen T, Gucciardi D, Jackson B. Stress, depressive symptoms, and maternal self-efficacy in first-time mothers: Modelling and predicting change across the first six months of motherhood. App Psych Health Well-being. 2019;11:126–47.
41. Leahy-Warren P, McCarthy G. Maternal parental self-efficacy in the postpartum period. Midwifery. 2011;27:802–10.
42. Teti DM, Candelaria MA. Parenting Competence. In: Bornstein MH, editor. Handbook of parenting, vol. 4. Social conditions and applied parenting. Mahwah, NJ: Erlbaum; 2012. p. 149–80.
43. Seetharaman M, Benjamin A, McGrath JM, Vance AJ. Parenting self-efficacy instruments for parents of infants and toddlers: A review. Int J Nur Stud Adv. 2022;4. Article 100082. https://doi.org/10.1016/j.ijnsa.2022.100082.
44. Wittkowski A, Garrett C, Calam R, Weisberg D. Self-report measures of parental self-efficacy: A systematic review of the current literature. J Child Fam Stud. 2017;26:2960–78.
45. Johnston C, Mash EJ. A measure of parenting satisfaction and efficacy. JCCP. 1989;18:167–75.
46. Carneiro P, Galazzo E, López-García I, Bedregal P, Cordero M. Parental beliefs, investments and child development: Evidence from a large-scale experiment. Bonn: IZA Institute of Labour Economics; 2019. IZA DP No. 12506.
47. Deković M, Asscher JJ, Hermanns J, Reitz E, Prinzie P, Van Den Akker AL. Tracing changes in families who participated in the home-start parenting program: Parental sense of competence as mechanism of change. Prev Sci. 2010;11:263–74.
48. Tuntipuchitanon S, Kangwanthiti IO, Jirakran K, Trairatvorakul P, Chonchaiya W. Online positive parenting programme for promoting parenting competencies and skills: randomised controlled trial. Sci Rep. 2022;12:1–12.
49. Deković M, Asscher JJ, Manders WA, van der Prins PJ, Laan P. Within-intervention change: mediators of intervention effects during multisystemic therapy. JCCP. 2012;80:574.
50. Högström J, Olofsson V, Özdemir M, Enebrink P, Stattin H. Two-year findings from a national effectiveness trial: Effectiveness of behavioral and non-behavioral parenting programs. J Ab Child Psych. 2017;45:527–42.
51. Karp SM, Lutenbacher M, Wallston KA. Evaluation of the parenting sense of competence scale in mothers of infants. J Child Fam Stud. 2015;24:3474–81.
52. Verstraete J, Ramma L, Jelsma J. Item generation for a proxy health related quality of life measure in very young children. Health Qual Life Outcomes. 2020;14:11. https://doi.org/10.1186/s12955-020-1271-1.
53. Petrou S. Methodological challenges surrounding QALY estimation for paediatric economic evaluation. Cost Eff Resour Alloc. 2022;20(1):10.
54. Van Breukelen GJ. ANCOVA versus change from baseline had more power in randomized studies and more bias in nonrandomized studies. J Clin Epidemiol. 2006;59:920–5.
55. Van Breukelen GJ. ANCOVA versus CHANGE from baseline in nonrandomized studies: The difference. Multivariate Behav Res. 2013;48:895–922.
56. Husereau D, Drummond M, Petrou S, Carswell C, Moher D, Greenberg D, Augustovski F, Briggs AH, Mauskopf J, Loder E, ISPOR Health Economic Evaluation Publication Guidelines-CHEERS Good Reporting Practices Task Force. Consolidated health economic evaluation reporting standards (CHEERS)–explanation and elaboration: a report of the ISPOR health economic evaluation publication guidelines good reporting practices task force. Value Health. 2013;16:231–50. https://doi.org/10.1016/j.jval.2013.02.002.
57. Jakobsen JC, Gluud C, Wetterslev J, Winkel P. When and how should multiple imputation be used for handling missing data in randomised clinical trials - a practical guide with flowcharts. BMC Med Res Methodol. 2017;17:162. https://doi.org/10.1186/s12874-017-0442-1.
58. Glatz T, Lippold M, Chung G, Jensen TM. A systematic review of parental self-efficacy among parents of school-age children and adolescents. Adoles Res Rev. 2023;6:1–7.
59. Fang Y, Boelens M, Windhorst DA, Raat H, vanGrieken A. Factors associated with parenting self-efficacy: A systematic review. J Adv Nurs. 2021;77:2641–61.
60. Gardner F, Leijten P, Mann J, Landau S, Harris V, Beecham J, Bonin EM, Hutchings J, Scott S. Could scale-up of parenting programmes improve child disruptive behaviour and reduce social inequalities? Using individual participant data meta-analysis to establish for whom programmes are effective and cost-effective. Southampton (UK): NIHR Journals Library; 2017.
61. Edwards RT, Jones C, Berry V, Charles J, Linck P, Bywater T, Hutchings J. Incredible years parenting programme: cost-effectiveness and implementation. J Child Serv. 2016;11:54–72.
62. Charles JM, Bywater TJ, Edwards RT, Hutchings J, Zou L. Parental depression and child conduct problems: evaluation of parental service use and associated costs after attending the incredible years basic parenting programme. BMC Health Serv Res. 2013;13:1–12.
63. Nystrand C, Helander M, Enebrink P, Feldman I, Sampaio F. Adding the coping power programme to parent management training: The cost-effectiveness of stacking interventions for children with disruptive behaviour disorders. ECAP. 2021;30:1603–14.
64. Sampaio F, Barendregt JJ, Feldman I, Lee YY, Sawyer MG, et al. Population cost-effectiveness of the Triple P parenting programme for the treatment of conduct disorder: an economic modelling study. ECAP. 2018;27:933–44.
65. Scavenius C, Amilon A, Schultz EA. A Cost-effectiveness analysis of caring in Chaos—a volunteer-delivered parent training program in Denmark. J Child Fam Stud. 2020;29:2836–49.
66. Charles JM, Edwards RT, Bywater T, Hutchings J. Micro-costing in public health economics: steps towards a standardized framework, using the incredible years toddler parenting program as a worked example. Prev Sci. 2013;14:377–89.
67. Iacobucci G. Cost of living is directly harming child health, paediatricians warn. BMJ. 2022;379:o2286. https://doi.org/10.1136/bmj.o2286.
68. Ravens-Sieberer U, Kaman A, Erhart M, Devine J, Schlack R, Otto C. Impact of the COVID-19 pandemic on quality of life and mental health in children and adolescents in Germany. ECAP. 2022;31:879–89.
69. Taylor-Robinson D, Barr B. Death rate now rising in UK's poorest infants. BMJ. 2017;357:j2258. https://doi.org/10.1136/bmj.j2258.
70. Stalford H. The price is rights!: Cost benefit analysis and the resourcing of children's services. Child Youth Serv Rev. 2019;99:395–407.
71. Suh E, Holmes L. A critical review of cost-effectiveness research in children's social care: What have we learnt so far? Soc Pol Admin. 2022. https://doi.org/10.1111/spol.12795.
72. Shadish WR, Cook TD, Campbell DT. Experimental and quasi-experimental designs for generalized causal inference. Mifflin and Company: Houghton; 2002.
73. Fang Y, vanGrieken A, Fierloos IN, Windhorst DA, Jonkman H, et al. Parental, child and socio-contextual factors associated with parenting self-efficacy among parents of children aged 0–7 years old: the CIKEO study. Soc Psych Epid. 2022;57:623–32.
74. Cuijpers P. Universal prevention of depression at schools: dead end or challenging crossroad? BMJ Ment Health. 2022;25(3):96–8.

Publisher's Note

AMERICAN PSYCHOLOGICAL ASSOCIATION

Journal of Family Psychology

ISSN: 0893-3200

https://doi.org/10.1037/fam0001370

Breaking Barriers: Enhancing Access and Outcomes in a Community-Based Parenting Intervention for At-Risk Families

Elana Mansoor, Melissa Gonzalez, Juliana Acosta, Lihua Xue, Abigail Peskin, W. Andrew Rothenberg, Emmalee S. Bandstra, Dainelys Garcia, Jason F. Jent, and Ruby Natale

Department of Pediatrics, University of Miami Miller School of Medicine

Prevention of behavioral and emotional problems in early childhood is essential to promote healthy development and reduce risky behaviors, academic failure, delinquency, and social difficulties. Evidence-based parenting interventions, such as the Incredible Years Toddler Basic program, are known to effectively address these challenges. However, access to such programs remains limited for many caregivers, especially those in ethnically diverse and at-risk families, due to structural, attitudinal, and interpersonal barriers. This study describes the implementation of the Incredible Years Toddler Basic parenting intervention, highlighting strategies to recruit, retain, and engage a predominantly Hispanic (68.3%), at-risk population while addressing participation barriers. Data from 301 families were collected using validated measures, including the Parental Stress Scale and the Adult and Adolescent Parenting Inventory, second edition. Of the participants, 262 (87%) met attendance requirements, significantly exceeding retention rates for comparable programs. Caregivers reported significant reductions in parental stress and improvements in parenting attitudes. Findings highlight the success of addressing structural, attitudinal, and interpersonal barriers to improve participation and outcomes in community-based parenting programs. This study serves as a model for leveraging community partnerships and tailoring programming to advance public health and support in ethnically diverse and at-risk families.

Keywords: early intervention, community-based interventions, Incredible Years Parenting Program, cultural adaptation, recruitment and retention

Prevention of behavioral and emotional problems in early childhood is critical to safeguard healthy child development, promote long-term behavioral health, and reduce the risk of future challenges such as engaging in risky behaviors (e.g., delinquency, substance use) and experiencing academic failure and social difficulties (Zarra-Nezhad et al., 2024). The consequences of untreated behavioral problems are vast and can last well into adolescence and adulthood (Goulter et al., 2024). Untreated behavioral and emotional difficulties in early childhood extend far beyond the child and family grappling with these issues. Research shows insufficient behavioral health support imposes significant societal costs, including school disruptions, strain on health care systems, and legal consequences (Goulter et al., 2024; Romeo et al., 2006). The ripple effects of untreated behavioral and emotional challenges don't just impact the individual, and they are widespread, affecting the community and economy (Goulter et al., 2024; Romeo et al., 2006).

Early intervention programs focused on parenting behaviors can play a vital role in preventing behavioral and emotional problems.

Arin M. Connell served as action editor.

Elana Mansoor https://orcid.org/0009-0001-7608-8868

Lihua Xue https://orcid.org/0009-0004-3695-3513

All data, analysis code, and research materials are available at the data repository (University of Miami, 2025). This study was approved by the University of Miami Human Subject Research Office Institutional Review Board (IRB; 20043435). Informed consent was obtained from all individual participants included in the study. The ideas and data presented in this article have not been previously published or disseminated in any form. This work is original and has not been made publicly available prior to this submission. This study's design and its analysis were not preregistered. For the remaining authors, no conflicts of interest were declared. Elana Mansoor has a Grant 2510-7571 from the Children's Trust that funds this program.

Elana Mansoor played a lead role in conceptualization, funding acquisition, investigation, methodology, project administration, supervision, writing–original draft, and writing–review and editing and a supporting role in data curation and formal analysis. Melissa Gonzalez played a supporting role in conceptualization, writing–original draft, and writing–review and editing. Juliana Acosta played a supporting role in conceptualization, writing–original draft, and writing–review and editing. Lihua Xue played a lead role in data curation and formal analysis and a supporting role in conceptualization, methodology, and writing–original draft. Abigail Peskin played a supporting role in conceptualization, formal analysis, writing–original draft, and writing–review and editing. W. Andrew Rothenberg played a supporting role in formal analysis and writing–review and editing. Emmalee S. Bandstra played a supporting role in conceptualization, investigation, writing–original draft, and writing–review and editing. Dainelys Garcia played a supporting role in conceptualization and writing–review and editing. Jason F. Jent played a supporting role in conceptualization and writing–review and editing. Ruby Natale played a supporting role in conceptualization, writing–original draft, and writing–review and editing.

Correspondence concerning this article should be addressed to Elana Mansoor, Department of Pediatrics, University of Miami Miller School of Medicine, P.O. Box 016960 (M-808), Miami, FL 33101, United States. Email: emansoor@med.miami.edu

Specifically, Behavioral Parent Training (BPT) programs are the most extensively researched and effective psychosocial interventions for families aiming to prevent and/or address early behavioral and emotional challenges, and support healthy child development (Arruabarrena et al., 2022; Kaminski & Claussen, 2017; Mingebach et al., 2018). Research on BPTs has consistently shown success in preventing the escalation of disruptive behaviors among diverse at-risk families (Kaminski & Claussen, 2017; Reid et al., 2001). These programs typically include a range of strategies such as parent training, skills practice for caregivers and children, and supportive resources. Additionally, BPT programs foster safe, supportive environments that build resilience and positive family coping skills, promote healthy caregiver–child interactions, and reduce stress within the family (Kaminski & Claussen, 2017). Long-term, preventing behavioral and emotional problems in early childhood benefits not only the child but society as a whole (Geelhoed et al., 2020). Children who receive support early on are more likely to succeed academically, avoid criminal involvement, and contribute positively to their communities (Geelhoed et al., 2020). Thus, investing in early prevention is a crucial step toward creating a healthier, more equitable future.

Despite significant investment in BPT programs and their success in addressing early child behavioral and emotional difficulties, their effect is not universal and largely depends on caregivers' access to and active engagement in these services (Quetsch et al., 2020). Families from marginalized racial and ethnic backgrounds face elevated risks of experiencing inequities across various social determinants of health. These include difficulties navigating the health care system, limited access to transportation and childcare, language barriers, and systemic issues like discrimination and racism (Jent et al., 2023). These challenges place families at a higher risk for being a teen parent, raising a child with disabilities, living with a low-income status, parenting a child with behavioral challenges, being involved in the dependency system, experiencing mental health or substance abuse issues, and lacking social support (Robbins et al., 2012). These concerns have been identified as barriers to BPTs, encompassing structural (e.g., access to transportation, competing demands, childcare needs, and location and time of services), attitudinal (e.g., fear of judgment related to receiving help and lack of trust), and interpersonal factors (i.e., mismatch between caregiver and provider, limited availability of services, lack of information or awareness of services, and difficulties with agency referral processes; Green et al., 2020; Smokowski et al., 2018; Weisenmuller & Hilton, 2021). The impact of these barriers is evident in well-established BPTs (e.g., Incredible Years, Triple P), which consistently have reported higher dropout rates among diverse, at-risk families (McCabe et al., 2020), highlighting ongoing challenges in engaging vulnerable populations in preventive interventions.

Incredible Years (IY) is an extensively studied BPT group parenting intervention, with robust evidence supporting its efficacy as both a treatment and preventive intervention for children with disruptive behaviors (Menting et al., 2013). IY aims to strengthen caregiver–child interactions and attachment, reduce harsh discipline and foster caregivers' ability to promote children's social and emotional competence and language development. The program's comprehensive and evidence-based framework has garnered significant recognition for its impact on child and family outcomes. The IY Training Series has been designated as a "Model Program" and a promising "Blueprints" program by the Office of Juvenile Justice Delinquency Prevention (Mihalic et al., 2001; U.S. Department of Justice, 2000). Additionally, it has been rated as an "Effective" program by Crime Solutions (National Institute of Justice, Crime Solutions, 2011), highlighting the program's strong empirical foundation and capacity to address risk factors associated with negative long-term outcomes. Extensive research has shown IY's effectiveness in improving children's social skills (Sebastian et al., 2019), emotion regulation (Webster-Stratton et al., 2018), problem-solving abilities (Gaspar et al., 2024), and academic preparedness (Chuang et al., 2020).

Despite IY's effectiveness, several critical gaps remain in the literature, particularly regarding its nuanced application across diverse cultural backgrounds. For example, most research on the IY program has focused on non-Latinx children ages 3–12, leaving Latinx families with toddlers largely underrepresented. This underrepresentation is especially problematic given the unique developmental needs during early childhood and the significant barriers Latinx families face in accessing culturally and linguistically appropriate behavioral health services (Leijten et al., 2017). Notably, Latinx families have historically been underrepresented in IY research, despite being the nation's largest racial and ethnic minority group (i.e., 19.5% of the total population; Leijten et al., 2017; U.S. Census Bureau, 2024). This gap in research limits the ability to assess whether the Incredible Years Toddler Basic (IYTB) program can effectively reduce disparities in access and improve outcomes for this growing population. Emerging research suggests shared cultural backgrounds between facilitators and families, including language, immigration experiences, and values, may enhance engagement and outcomes, yet this promising direction remains relatively underexplored (Kapke & Gerdes, 2016; Leijten et al., 2017; Smokowski et al., 2018). In addition, despite IY's inclusion of numerous recommendations to retain families, many studies to date use only a few strategies in isolation (e.g., offering childcare or transportation) rather than evaluate the effectiveness of comprehensive, multilevel strategies that address the complex and intersecting barriers faced by ethnically and socioeconomically diverse families (Dunn, 2012; Morpeth et al., 2017). Moreover, while external stressors such as housing insecurity or immigration concerns are known to impact attendance and attrition, parenting programs less commonly integrate navigation services or resource linkage into their delivery models. Opportunities to build community and connection outside of the formal curriculum through technology also remain underutilized. For example, tools such as group messaging platforms or text communication in families' preferred languages hold promise for enhancing engagement (Nichols et al., 2024). Further, most group parenting programs continue to target families with children who meet diagnostic criteria for specific mental health conditions, such as attention-deficit hyperactivity disorder or conduct disorder, thereby excluding families whose children may be at-risk due to elevated stress or negative parenting practices but do not meet clinical thresholds (Campbell et al., 2000; Izett et al., 2021). In addition, the literature on effectively engaging broader family systems, such as fathers, grandparents, and other extended caregivers within IY implementation among Latinx communities remains limited, despite the cultural importance of collective caregiving in these communities. Expanding this focus could help ensure programs are more inclusive and culturally responsive. Finally, studies rarely incorporate culturally meaningful or skill-reinforcing incentives (e.g., Spanish-language children's books) or intentionally create informal spaces that foster connection and belonging, which are known drivers of sustained engagement in collectivist cultures. Together, these gaps

highlight the need for more inclusive, culturally grounded, and holistic approaches to engaging Latinx families in parenting interventions.

Given the critical need for early, community-based parenting interventions that engage all families, this study focused on the implementation of the IYTB parenting program for caregivers of children ages 1–3, the majority of whom were Latinx (68.3%). The program incorporates a framework for addressing structural, attitudinal, and interpersonal barriers to enhance recruitment and retention in IYTB groups (Smokowski et al., 2018). Participating families were identified as at-risk due to one or more of the following factors: teen parents, families of children with disabilities, low-income households as defined by the Miami-Dade Housing and Urban Development guidelines (Miami-Dade County, n.d.), children with emerging behavior problems, families involved in the dependency system, caregivers with limited social support and/or those with mental health or substance use issues. Specifically, we describe recruitment and retention strategies, staff training procedures, cultural considerations in program delivery, and fidelity of implementation to ensure culturally responsive, accessible, and evidence-based care for families primarily of Latin descent. In addition, we examined family level outcomes such as parental stress and parenting attitudes. By describing concrete strategies that have been effective with populations facing significant barriers, we aim to offer clinicians actionable insights for working with Latinx families and improving engagement in critical early intervention services.

Method

Participants

Participants were 301 caregivers and their 1–3-year-old children enrolled in the IYTB parenting program from December 7, 2017 to March 15, 2020. Enrollment for the purpose of this study was defined as completing preintervention measures and attending one session. The majority of participants who completed the IYTB program were the biological parent (93.5%), female (79.4%), and over 31 years of age (80.5%). Over half of the participants were Latinx (68.3%), and 69.5% of the participants had a bachelor's degree or higher. Demographic characteristics are presented for all participants in Table 1.

Procedure

Recruitment

The IYTB parenting program is an evidence-based group curriculum for caregivers of children ages 1–3. The present study was

Table 1
Caregiver Descriptive Characteristics

Characteristics of caregiver	Completed pretest and ≥1 session $N = 301$ *n* (%)	Completed pretest and posttest $N = 262$ *n* (%)	Completed pretest only $N = 39$ *n* (%)	$\chi^2(df)$, p[a]
Primary language				
English	192 (63.8)	163 (62.2)	29 (74.4)	2.3(2), .319
Spanish	92 (30.6%)	84 (32.6)	8 (20.5)	
Other	17 (5.6%)	15 (5.7)	2 (5.1)	
Gender				
Female	241 (80.1)	208 (79.4)	33 (84.6)	0.58(1), .446
Male	60 (19.9)	54 (20.6)	6 (15.4)	
Race				
Asian	16 (5.3)	13 (5.0)	3 (7.7)	14.5(4), .006
Black/African American	52 (17.3)	40 (15.3)	12 (30.8)	
White	187 (62.1)	173 (66.0)	14 (35.9)	
Multiracial	22 (7.3)	16 (6.1)	6 (15.4)	
Other	24 (8.0)	20 (7.6)	4 (10.3)	
Ethnicity				
Hispanic	200 (66.5)	179 (68.3)	21 (53.9)	3.2(1), .074
Non-Hispanic	101 (33.5)	83 (31.7)	18 (46.1)	
Education level				
High school/General Equivalency Diploma or <High school	49 (16.3)	38 (14.5)	11 (28.2)	11.2(3), .011
Some college or associate's degree	53 (17.6)	42 (16.3)	11 (28.2)	
Bachelor's degree	89 (29.6)	79 (30.2)	10 (25.6)	
Graduate degree	110 (36.5)	103 (39.3)	7 (18.0)	
Marital status				
Married	201 (66.8)	182 (69.5)	19 (48.7)	7.3(2), .027
Divorced or separated	26 (8.6)	22 (8.4)	4 (10.3)	
Never married	74 (24.6)	58 (22.1)	16 (41.0)	
Age group				
18–25 years	18 (6.0)	14 (5.3)	4 (10.3)	11.5(2), .003
26–30 years	50 (16.6)	37 (14.1)	13 (33.3)	
Age 31 years or above	233 (77.4)	211 (80.5)	22 (56.4)	
Caregiver relationship				
Biological parent	283 (94.0)	245 (93.5)	38 (97.4)	0.93(1), .335
Nonbiological parent	18 (6.0)	17 (6.5)	1 (2.6)	

[a] The "completed pretest and ≥1 session" group combines both the "completed the pretest and posttest" and "completed pretest only" groups to provide an overall picture of the demographic characteristics of the sample as a whole. The chi-square test results are from comparison of completed both pre and post versus completed pretest only.

approved by the University of Miami Human Subject Research Office Institutional Review Board (Protocol No. 20043435). Recruitment was county-wide and facilitated by over 20 community partners, including childcare sites, health care centers, and places of worship. Partners provided referrals, childcare, and free space for on-site hosting of parenting groups. Collaborative partnerships were maintained and strengthened by the program director and staff who engaged in regular communication with partners, by phone and face-to-face, to obtain feedback and suggestions regarding program implementation and to address issues as they arose. Additional recruitment efforts consisted of presentations at collaborating sites, annual community expositions and health fairs, as well as university publications and occasional TV/radio coverage. Other methods included culturally sensitive flyers distributed in English and Spanish throughout the community, a website hosted by the university, and social media accounts (i.e., Facebook and Instagram) that distributed bilingual information about upcoming group availability and registration. A significant number of word-of-mouth referrals were also received through recommendations by caregivers who had previously completed our IYTB parenting program. Advertising materials were translated into Spanish by native Spanish-speaking staff and supervisors and underwent back-translation to ensure accuracy. Materials featured images of Latinx families to enhance cultural relevance and inclusivity. In addition, the language utilized was intentionally destigmatizing (e.g., program instead of intervention). Last, Latinx individuals reviewed the flyers to ensure cultural accuracy, appropriateness, and effective communication with the target population.

Screening and Enrollment

Participants registered for groups by phone, online, or by mailing or emailing a self-referral form. Potential participants were administered a phone-based individualized needs assessment to enable participants to feel more comfortable and avoid stigma tied to clinical assessments, such as fears of diagnosis or parenting criticism. Nonstigmatizing intake procedures were intentionally implemented given that mental health services have historically been stigmatized or mistrusted by the Latinx population (Newberry et al., 2024). Individualized needs assessments were implemented to identify at-risk factors at the family and environmental levels (e.g., child developmental delays, child-protective services involvement, food and housing insecurity) and additional needs for psychosocial services. The only eligibility criteria included having a child between the ages of 1 and 3 years and residing in Miami-Dade County, Florida, United States.

To ensure participation, barriers to accessing our services were identified at first contact (e.g., childcare, transportation) and program staff worked individually with each family to problem-solve these barriers (i.e., recruitment director directly communicated with each eligible family, referral linkage, and provision of incentives). Families were given the option to choose the group that best fit their geographic location, preferred language, and schedule. Those ineligible for enrollment were referred to other community resources when appropriate. We leveraged strong partnerships with local organizations to ensure follow-up and improve the likelihood of successful linkage and support. Furthermore, being situated within an academic medical center afforded us the unique opportunity to make direct referrals to relevant health care services within our institution, streamlining access and ensuring a more seamless transition for families requiring medical or mental health support. Prior to or during the first group session, participants completed consents, demographic forms, and preintervention assessments in English or Spanish based on their preference. Trained program staff offered to read forms aloud to ensure understanding among all participants. Consents were explained in a language understandable to participants and according to informed consent procedures.

The IYTB parenting program taught positive parenting and discipline strategies, promoted school readiness, and focused on building nurturing parent–child relationships. It also aimed to strengthen family functioning and improve caregiver knowledge. The program was offered to caregivers of children ages 1–3 in Miami-Dade County, Florida, United States (Webster-Stratton, 2011; see Table 2 for curriculum details).

Two trained facilitators conducted each group session in either English or Spanish. IYTB groups addressed family beliefs and traditions and encouraged rituals and routines that supported each individual family through participant-generated examples (e.g., when discussing discipline and bedtime routines, families shared their own beliefs). Facilitators also shared experiences that reflected the group's diverse cultural values, fostering inclusion and connection. They utilized a combination of engaging and interactive teaching methods including video vignettes featuring culturally diverse families engaging in real-life scenarios. These vignettes served as discussion points on effective and ineffective parenting strategies. Facilitators also utilized role-plays to enable participants to practice new skills learned during sessions in a supportive environment. Group discussions, facilitator-guided activities, and reflection exercises further enhanced learning, encouraging participants to share experiences and apply concepts to their daily interactions with their children. Last, facilitators promoted skills practice by assigning specific weekly activities (e.g., child-directed play) to be implemented at home with their children. Childcare was provided during sessions to reduce barriers to attendance and allow caregivers to effectively engage with the content, skill practices, and discussions. During the study duration, a total of 33 IYTB groups were conducted, 18 of which were in Spanish. Groups consisted of 12–15 parents who met 2 hr weekly for 12 sessions.

Cultural Considerations

To address the multifaceted barriers faced by Latinx families, our study implemented several strategies such as targeted outreach within their neighborhoods and through trusted community networks. Language and cultural differences were mitigated by employing native Spanish-speaking facilitators with similar cultural backgrounds. Program materials were also provided in the families' preferred language. Additional materials, including bilingual resources and culturally relevant role-playing scenarios that aligned with Latinx values such as *familismo* and *respeto*, were added to ensure greater cultural responsiveness. These materials incorporated real-life examples, storytelling, and traditions that reflected the experiences of Latinx families. In addition, facilitators shared relevant examples from their own lived experiences, fostering a genuine connection among caregivers and facilitators. Resource limitations were addressed by providing childcare, meals, and transportation and by soliciting input on convenient group scheduling. To

Table 2
Summary of Incredible Years Parents and Toddlers Program Content

Content	Objective	Content	Objective
	Toddler program 1–3 years		
Part 1: Child-directed play promotes positive relationships	• The value of attention to increase positive child behaviors • Promoting imaginary and pretend play • Developmental needs and milestones • Balancing parent–child power dynamics • Building children's self-esteem and creativity through child-directed play	Part 2: Babies as intelligent learners (3–6 months)	• How to model and prompt language development • How to coach preschool readiness skills • "Descriptive commenting" and child-directed coaching • "Persistence coaching" to build children's persistence
Part 3: Social and emotion coaching	• Using emotion coaching to build children's emotional vocabulary • How to prompt social coaching to encourage children's social skills • How to coach sibling and peer play and apply principles in other settings • Developmental stages of play	Part 4: The art of praise and encouragement	• Labeling praise and handing resistance to praise • Modeling self-praise and promoting positive self-talk • Praising social and self-regulation skills • Building self-esteem
Part 5: Spontaneous incentives for toddlers	• Shaping behaviors in the direction you want "small steps" • Unexpected and spontaneous rewards • Recognizing the "first-then" principle • Setting up programs for problems (i.e., not dressing, noncompliance)	Part 6: Handling separations and reunions	• Establishing routines for separating and greeting children after time apart. • Understanding object and person permanence • Toddler-proofing home safety checklist and providing adequate monitoring
Part 7: Positive discipline—effective limit setting	• The importance of distractions and redirections • The value of giving children choices • Politeness principle and modeling respect • Commands should be clear, brief, respectful, and action oriented	Part 8: Positive discipline—handling misbehavior	• Use of distractions and redirections with the ignoring technique • Parents using calm-down strategies and positive self-talk • How to help toddlers practice calming down

Note. Adapted from *The Incredible Years Parents, Teachers, and Children's Training Series: Program Content, Methods, Research, and Dissemination 1980–2011* (pp. 59–60), by C. Webster-Stratton, 2011, Incredible Years (https://www.incredibleyears.com). Copyright 2011 by Carolyn Webster-Stratton. Adapted with permission.

combat distrust of the system and providers, we leveraged decade-long relationships with community partners, relied on trusted referrals, individually addressed families' concerns, and provided accessible information, thereby improving mental health literacy and awareness of developmental needs. Moreover, the intervention inherently countered reliance on potentially inaccurate familial advice by providing evidence-based information on development, parenting, and behavior. The group setting facilitated bonding and the program was tailored to enhance families' comfort level through collaborative rule-setting. Extended family members were also invited to attend the group to respond to Latinx' values of *familismo* and to increase families' sources of support. Last, IY video vignettes were preselected to reflect the diversity of the population served.

Training

Facilitators were university staff, all with a master's degree or higher, who received curriculum-specific expert-training. Training for the IYTB parenting program included a 3-day workshop conducted by a certified IY trainer. The certified trainer also provided consultation as needed to discuss issues, provide feedback, and ensure evidence-based practice (EBP) fidelity requirements were met. Staff then cofacilitated groups with other experienced facilitators until proficiency was demonstrated. Facilitators were culturally and linguistically representative of the Miami-Dade community (83% Latinx facilitators compared to 75% Latinx residents) in Florida, United States. Facilitators were assigned to specific groups by the program director, ensuring that those conducted in Spanish were led by native Spanish-speaking facilitators and groups in English were led by fluent English-speaking staff. Facilitators participated in implicit bias training to recognize and address personal beliefs that could influence their interactions with families. This was further explored during reflective supervision. Facilitators were encouraged to utilize a nonjudgmental approach during the groups. Due to their shared cultural and linguistic background, facilitators were in a unique position to empathize with the experiences of the families (e.g., language barriers), build trust and rapport, and provide culturally responsive support (Barnett et al., 2018).

Engagement and Retention: Structural, Attitudinal, and Interpersonal Approaches

Strategies utilized to increase engagement and retention in IYTB groups were evidence-based and consisted of structural, attitudinal, and interpersonal methods (Smokowski et al., 2018), some of which addressed barriers in multiple domains simultaneously. Each strategy is described below in only one domain to minimize redundancy.

Structural

Groups were free and scheduled with collaborating community partners to address structural barriers to participation. Families interested in enrolling were surveyed to identify the best time, day, and location for group sessions. Since groups took place over multiple weeks, and attendance at each session was critical to ensuring programmatic effectiveness, it was essential to receive community partner and caregiver feedback when scheduling groups. To facilitate wider access, groups were offered in English and Spanish at a variety of times, including evenings, to accommodate diverse family schedules and preferences. Preferred language was prioritized when completing assessments and throughout the intervention. In addition, program curricula and marketing materials were designed to be family friendly, culturally relevant (e.g., using images of Latinx families and their communities in advertising), and engaging. Groups offered fellowship and support opportunities and meal- or snack-time during each session. Staff also worked with participants to problem-solve other possible barriers (e.g., transportation and childcare) to participation when needed by offering bus tokens, public transportation reimbursement, and childcare.

Other retention methods included phone calls for session reminders, and identification/coordination of service referral needs. If a participant was absent from the group, immediate phone contact and supportive problem-solving strategies were employed, both during the session to see if they could join, and after to check in and/or offer options for make-up sessions. As an incentive for attendance and a tool to practice skills at home, participants received topic-related educational items at the end of each session (e.g., stickers to promote positive reinforcement).

Attitudinal

Recruitment and retention strategies were also implemented to address misconceptions and foster positive attitudes about participation. The recruitment director reached out to each participant interested in enrolling and individually assessed the caregiver's expectations and goals for the group to ensure program appropriateness. Clear and accurate information about the benefits and outcomes of the program were provided and any concerns were addressed.

During the first group session, facilitators aimed to create a safe and supportive environment by collaboratively establishing group rules that encouraged shared experiences to be respected, which aligns with typical practices in the first sessions of the IY program. In addition, the importance of listening, being nonjudgmental, and supporting one another throughout the sessions was promoted. Facilitators also emphasized the value of each participant's contribution through incentives and consistent praise. They acknowledged and validated caregivers' questions and responses, using positive reinforcement to encourage continued participation. In addition, facilitators normalized common parenting challenges, which let participants know they were not alone in their struggles, making it easier for them to share openly. Facilitators were culturally responsive, encouraging caregivers to share their individual beliefs about parenting and the strategies taught. These discussions aimed not only to overcome attitudinal barriers but also to cultivate a positive and engaging experience that encouraged ongoing involvement throughout the program's duration.

Interpersonal

Each session caregivers shared parenting successes and struggles experienced the previous week, engaged in parenting topic discussions, worked in small groups to role play and practice skills, and shared a snack or meal. These activities promoted bonding among group members and some even continued meeting after the program ended. A family friendly, optional, encrypted group chat (i.e., WhatsApp) to discuss parenting concerns was also created. This enabled caregivers to further increase their social support by

developing relationships with one another outside of the group. Caregivers were informed about the limits of confidentiality related to the chat and were instructed to restrict comments to parenting topics. Facilitators monitored the chat to ensure that comments were appropriate. They also checked in with caregivers before and throughout the group to assess and address comfort level and any individual needs or interpersonal concerns. In addition, facilitators built trust, prioritized cultural differences and norms, and celebrated individual and group accomplishments, further contributing to an accepting and supportive environment. Participants were encouraged to provide feedback, including suggestions for improvement regarding content, process, and dynamics following sessions and anonymously upon group completion. This strategy conveyed that their input was welcomed and valued.

Measures

Intervention Engagement and Retention

Attendance. A standardized attendance log and sign-in sheets were used to collect data on participant attendance throughout the intervention. The log tracked the frequency of attendance, which was utilized to gauge participant engagement and retention.

Intervention Completion. Retention in the program was calculated by examining the proportion of participants who completed the pre- and postintervention assessment and completed at least 10 of 12 sessions of the intervention. Completing this number of sessions aligned with the evidence-based practice (EBP) guidelines, which identified this duration as optimal for improved outcomes (Webster-Stratton, 2011).

Family Level

Parental Stress Scale. The Parental Stress Scale (PSS; Berry & Jones, 1995) is a questionnaire assessing caregivers' feelings about their parenting role. The English version has 18 items. The Spanish version has 12 items. The PSS has different numbers of items in the English and Spanish versions due to cultural adaptations and psychometric evaluations. Specifically, certain items from the original English version were modified or removed in the Spanish version to ensure cultural relevance and maintain the scale's reliability and validity within Spanish-speaking populations (Oronoz et al., 2007). Both versions include positive statements (e.g., emotional benefits, personal development) and negative perceptions of parenting (e.g., demands on resources, feelings of stress). Respondents rate how much they agree or disagree with each statement. Items are scored and then summed. The English version total scores range from 18 to 90 with higher scores indicating higher levels of parental stress. Scores for the Spanish version range from 12 to 60. Chronbach's α was .79 and .86 for the English and Spanish versions, respectively, indicating generally stable and consistent results. In this study, caregivers completed the PSS at enrollment and postintervention, and it was used to measure improvement in parenting stress. The PSS has been demonstrated to be valid and reliable in Spanish (Oronoz et al., 2007) and English (Abidin, 2012).

Adult and Adolescent Parenting Inventory, Second Edition. The Adult and Adolescent Parenting Inventory, second edition (AAPI-2) is a 40-item inventory of parenting attitudes for adult and adolescent caregivers (Bavolek & Keene, 2010). It is available in English and Spanish and can be used to assess pre- and postintervention effectiveness and identify caregiver strengths and weaknesses. Total, raw, and standard tens (sten) scores, derived from raw scores and divided into 10 standard units each representing a standardized point on a scale of 1–10, are provided across these subscales: *Expectations of Children* (measures unrealistic expectations regarding children's developmental abilities), *Parental Empathy Toward Children's Needs* (assesses the caregivers ability to empathize and respond to their children's emotional needs), *Use of Corporal Punishment* (evaluates the extent to which parents support the use of physical discipline), *Parent–Child Family Roles* (identifies parents who expect children to fulfill their emotional needs), and *Children's Power and Independence* (measures the degree to which parents attempt to control and limit their child's independence; Bavolek & Keene, 2010). Scores on each of the five subscales have been shown to discriminate between caregivers who are abusive or neglectful and those who are believed to be nonabusive or nonneglectful, with higher scores indicating more appropriate parenting and child rearing practices (Bavolek & Keene, 2010). Analyses presented for the present study only include raw and total scores. Chronbach's α was .80 and .84 for the pre- and postintervention assessments, respectively, indicating good internal consistency. IYTB participants completed the AAPI-2 at enrollment and postintervention.

Program Fidelity

Fidelity Checklists. Quarterly fidelity observations were conducted by doctoral-level programmatic supervisors using a curriculum-specific fidelity checklist. Following each observation, facilitators received immediate feedback, and any identified concerns were addressed to ensure full adherence to curriculum standards. Group facilitators also completed the fidelity checklists as a self-evaluation following each session, reinforcing a comprehensive approach to maintaining fidelity during all sessions.

Program Delivery Effectiveness

Intervention Implementation. Implementation was defined as the degree to which an intervention can be successfully delivered to the intended participants by measuring rates of intervention and assessment completion and session attendance (Carroll et al., 2007).

Analytic Plan

To assess retention, attendance logs and sign-in sheets were used to determine which participants met the evidence-based practice (EBP) retention requirements (i.e., attending 10 of 12 sessions). When examining pre- and postintervention improvement only those who completed both the pre- and postassessments and attended the minimum number of weekly sessions (i.e., 10) were included (n = 262). Only completers were included in the analyses because the focus of the present study was to better understand the implementation of the IYTB parenting program within community-based settings. Descriptive and chi-square analyses were conducted to measure family engagement and retention. Paired t tests were used to compare pre- and posttest scores on the PSS and AAPI-2. Chi-square tests were used to evaluate relationships between change in pre- and postassessment scores, participant demographics, and

session factors such as attendance. Results were deemed significant at $p < .05$.

Transparency and Openness

We reported how we determined our sample size, all data exclusions, all manipulations, and all measures in the study, and we followed JARS. All data, analysis code, and research materials are available in the data repository at https://miami.app.box.com/s/rdjizm3l3cpevcj752lajyqs18o3ulc9.

All statistical analyses were completed using Statistical Analytic Software (SAS Institute, Inc., 2008). This study's design and its analysis were not preregistered.

Results

Access to Intervention

Access to IYTB program services was robust, with high retention rates among enrolled participants. Three hundred one caregivers completed the preintervention assessment and attended at least one session. When evaluating differences between those who completed the program versus those who did not, completers were more likely to be White, married, have higher education, and be older in age (31 or above). For more demographic details regarding enrolled families and families that met curriculum completion requirements see Table 1.

Intervention Engagement and Retention

Participant engagement and retention rates exceeded typical rates for community-based interventions (Joo & Liu, 2021, p. 20; Smokowski et al., 2018; Kapke & Gerdes, 2016). Out of the 301 caregivers who completed the preintervention assessment, 262 (87.0%) met the EBP attendance requirement of 10 or more sessions.

Family Level Outcomes

Parental Stress

The PSS forms in English and Spanish were analyzed separately. Table 3 presents the means and standard deviations of pre- and postintervention scores for families who completed the IYTB program. Paired *t* tests comparing pre- and postintervention scores revealed significantly lower caregiver-reported parenting stress at postintervention compared to preintervention for participants who completed the PSS in English, $t(189) = 8.8$, $p < .0001$, as well as for participants who completed the PSS in Spanish, $t(63) = 6.1$, $p < .0001$.

Parenting Attitudes

Participating families ($N = 262$) reported significant improvements in their total raw scores, $t(261) = 16.6$, $p < .0001$, and on each subscale of the AAPI-2. Families reported significantly higher scores at postintervention compared to preintervention on the *Expectations of Children* subscale, $t(261) = 13.2$, $p < .0001$, indicating more appropriate expectations following the intervention. Higher scores were also evidenced at postintervention for the *Parental Empathy Toward Children's Needs* subscale indicating increased empathy for their children, $t(261) = 11.8$, $p < .0001$. Scores on the *Use of Corporal Punishment* subscale were significantly higher at postintervention as well, $t(261) = 12.7$, $p < .0001$, indicating decreased use of corporal punishment and greater use of alternative discipline strategies for both groups. Significantly higher scores were also found at postintervention for the *Parent–Child Family Roles*, $t(261) = 13.2$, $p < .0001$, and the *Children's Power and Independence* subscales, $t(261) = 9.1$, $p < .0001$. Higher scores at postintervention for these scales indicate that caregivers maintained appropriate roles for themselves and their children and encouraged their children to make independent decisions with support, respectively (see Table 3).

Discussion

Despite growing recognition of the benefits of early parenting interventions for young children and their families, high-quality, affordable parenting programs are not readily accessible in many communities, especially those serving at-risk and diverse populations (Smokowski et al., 2018). This study described the implementation and outcomes of the IYTB parenting program for primarily Latinx caregivers with at-risk children ages 1–3 using a framework that addresses structural, attitudinal, and interpersonal barriers. Results

Table 3
Caregiver Pre- and Postintervention Scores for Incredible Years Toddler

Measure	Pretest *M* (*SD*)	Posttest *M* (*SD*)	Difference (*SD*)	*t*	*df*	*p*
Parental Stress Scale						
English form ($n = 190$)	35.1 (8.6)	30.8 (7.5)	4.3 (6.7)	$t = 8.8$	189	<.0001
Spanish form ($n = 64$)	23.9 (8.0)	20.2 (6.0)	3.7 (4.9)	$t = 6.1$	63	<.0001
AAPI ($N = 262$)						
A: Expectations of children	22.4 (5.6)	26.9 (5.7)	4.5 (5.5)	13.2	261	<.000
B: Parental empathy toward children's needs	40.3 (5.8)	44.1 (4.8)	3.8 (5.2)	11.8	261	<.0001
C: Use of corporal punishment	42.6 (6.8)	47.4 (6.1)	4.8 (6.1)	12.7	261	<.0001
D: Parent–child family roles	26.9 (5.1)	30.6 (4.4)	3.7 (4.5)	13.2	261	<.0001
E: Children's power and independence	21.0 (2.5)	22.4 (2.3)	1.4 (2.4)	9.1	261	<.0001
Total raw	153 (19.9)	171 (18.9)	18 (17.7)	16.6	261	<.0001

Note. AAPI = Adult and Adolescent Parenting Inventory.

suggested this study may serve as a model for programs seeking to implement community-based parenting groups with predominantly Latinx families, with retention rates (87%) surpassing those documented in the literature (e.g., 30%–75%; Joo & Liu, 2021; Kapke & Gerdes, 2016). Findings indicated the IYTB parenting program was feasible to implement, and recruitment and retention strategies were effective in addressing barriers commonly cited in the literature (Holtrop et al., 2023; Rostad et al., 2018; Smokowski et al., 2018). Staff employed a variety of strategies, drawing from existing studies and incorporating innovative approaches that specifically targeted barriers, resulting in increased rates of enrollment, engagement, and retention. This discussion explores the implications of our findings, focusing on how the use of the structural, attitudinal, and interpersonal framework contributed to the program's effectiveness and outcomes.

Scientific literature highlights the importance of working closely with the community and families during all stages of program development and implementation to retain participants in services and have successful outcomes (Nguyen et al., 2021). Within the present study, structural barriers were effectively addressed through strategic planning, community collaboration, and family-centered approaches. By providing free and culturally responsive sessions in the family's preferred language, at varied times to accommodate caregiver needs, the program demonstrated a commitment to inclusivity. Efforts such as asking families their preferred group schedule, offering transportation and childcare assistance, and integrating culturally appropriate materials may have further reduced participation challenges.

Retention strategies were equally robust. Personalized phone calls for session reminders and immediate follow-ups for absences supported ongoing engagement. These efforts, combined with fellowship opportunities (including ongoing out-of-session contact with other group members), snacks or meals, and problem-solving individual barriers likely contributed to high retention rates and participant satisfaction. The program's approach to recruitment and retention aligned with best practices to promote attitudinal engagement.

In addition, consistent with recommendations in the literature (Rostad et al., 2018; Smokowski et al., 2018), interpersonal barriers were addressed by intentionally promoting group cohesion, cultural responsiveness, and honest communication. For example, facilitators encouraged families to share personal successes and challenges, which likely fostered a sense of belonging and mutual support by highlighting shared experiences. Cultural sensitivity and inclusivity were also emphasized throughout the sessions' content and discussion, helping caregivers feel validated and understood, as recommended by previous research (Joo & Liu, 2021). Furthermore, gathering participant feedback and caregiver-generated real-life examples enriched discussions and activities, further contributing to group engagement and cohesion. Notably, several families reported developing lasting friendships with other group caregivers, reflecting the strong connections built during the program.

Findings not only demonstrated high retention rates, exceeding those of most community-based parenting interventions (Smokowski et al., 2018), but also significant gains in positive parenting practices and reductions in parental stress. These improvements directly enhance the quality of life for both caregivers and children. Caregivers who gained knowledge of child development and adopted more appropriate parenting practices, as evidenced by improved AAPI-2 scores, may be better equipped to foster healthier and more secure relationships with their children. Strengthened caregiver–child relationships are known to lead to stronger attachment, improved emotional regulation in children, and long-term developmental benefits (Arruabarrena et al., 2022; Jeong et al., 2021). Moreover, reductions in parental stress have profound implications for families too. Specifically, lower stress levels related to parenting may have enhanced caregivers' ability to respond calmly and positively to their children, reducing the likelihood of negative interactions and creating a more nurturing home environment. Such changes also contribute to a family environment that fosters children's development, behavioral, emotional well-being, and resilience with the goal of deterring psychopathology later in life.

Limitations and Future Directions

Study findings should be interpreted in the context of certain limitations. While significant improvements in parental stress and attitudes were observed, the lack of a control group prevents causal inferences. Future studies should utilize randomized-controlled or quasi-experimental designs. It may also be beneficial for outcome measures to include behavioral observations of parent–child interactions and measures of child social and behavioral adaptation.

In addition, we only included treatment completers in analyses as our focus was to discuss the implementation of IYTB in community-based settings. Despite this, completers differed from noncompleters on various variables, potentially skewing our findings. Specifically, our analyses revealed that program completers were more likely to be White, married, older (age 31+), and more highly educated. These demographic differences suggest some barriers may not have been fully mitigated by the strategies implemented, particularly as it relates to effectively retaining families with the greatest risk and need. This limits the generalizability of findings and underscores the need for more targeted retention strategies among families facing greater adversity. Future research could pair the retention and engagement strategies in this study with other evidence-based methods (e.g., the recruitment of paraprofessional natural helpers from the communities which has been demonstrated to recruit and retain non-White, younger families of diverse structures at higher rates into parenting programs; Garcia et al., 2023). In addition, conducting long-term follow-ups would help determine whether improved family level outcomes translate to sustained child behavioral changes and improved family dynamics over time. Further, future research should collect data on utilization rates of support services (e.g., childcare, transportation) to determine the role they play in fostering retention and engagement.

While this study relied on self-reported data, systematic reviews have demonstrated that parenting interventions delivered during the first 3 years of life improve parenting knowledge, practices, and parent–child interactions (Jeong et al., 2021). These findings also align with the Families First Prevention Services Act (U.S. Congress, 2018), which underscores the importance of investing in preventive, community-based parenting interventions that support family stability and child well-being. This study also highlights how to reduce challenges when serving marginalized populations. High retention rates may reflect both the program's efforts to address barriers and its services in neighborhoods with primarily Latinx families. Future research should explore the program's scalability in other ethnically diverse or underserved populations.

Conclusions

From a public health perspective, the program's success with a primarily Latinx population, emphasizes the critical role of accessible, culturally responsive, evidence-based parenting programs to reduce health disparities. Retrospectively, key lessons learned about cost-effective program implementation include leveraging existing community resources and partnerships to reduce barriers and recruiting bilingual staff to diversify the workforce. Providing access to culturally adapted materials and offering flexible, group-based sessions in trusted community spaces also helped lower costs while maintaining accessibility. By strengthening family relationships, reducing parental stress, and promoting positive parenting, these interventions contribute to healthier communities and reduced societal costs associated with behavioral and emotional problems. To sustain and expand such efforts, it is imperative to influence policy, secure state and federal funding streams, and continue evaluating program impact through research. This study serves as a model for leveraging community partnerships and tailored programming to advance public health and support at-risk and diverse families.

References

Abidin, R. R. (2012). *Parenting stress index* (4th ed.). Psychological Assessment Resources.

Arruabarrena, I., Rivas, G. R., Cañas, M., & Paúl, J. (2022). The Incredible Years parenting and child treatment programs: A randomized controlled trial in a child welfare setting in Spain. *Psychosocial Intervention*, *31*(1), 43–58. https://doi.org/10.5093/pi2022a2

Barnett, M. L., Lau, A. S., & Miranda, J. (2018). Lay health worker involvement in evidence-based treatment delivery: A conceptual model to address disparities in care. *Annual Review of Clinical Psychology*, *14*(1), 185–208. https://doi.org/10.1146/annurev-clinpsy-050817-084825

Bavolek, S., & Keene, R. G. (2010). *Adult-Adolescent Parenting Inventory AAPI-2: Administration and development handbook*. Family Development Resources.

Berry, J. D., & Jones, W. H. (1995). The Parental Stress Scale: Initial psychometric evidence. *Journal of Social and Personal Relationships*, *12*(3), 463–472. https://doi.org/10.1177/0265407595123009

Campbell, S. B., Shaw, D. S., & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. *Development and Psychopathology*, *12*(3), 467–488. https://doi.org/10.1017/S0954579400003114

Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science*, *2*(1), Article 40. https://doi.org/10.1186/1748-5908-2-40

Chuang, C., Reinke, W. M., & Herman, K. C. (2020). Effects of a universal classroom management teacher training program on elementary children with aggressive behaviors. *School Psychology*, *35*(2), 128–136. https://doi.org/10.1037/spq0000351

Dunn, L. (2012). *Research report into Māori and non-Māori retention in Incredible Years Parent Programme*. Ministry of Education, Special Education, Central North Region.

Garcia, D., Barnett, M. L., Rothenberg, W. A., Tonarely, N. A., Perez, C., Espinosa, N., Salem, H., Alonso, B., San Juan, J., Peskin, A., Davis, E. M., Davidson, B., Weinstein, A., Rivera, Y. M., Orbano-Flores, L. M., & Jent, J. F. (2023). A natural helper intervention to address disparities in Parent–Child Interaction Therapy: A randomized pilot study. *Journal of Clinical Child and Adolescent Psychology*, *52*(3), 343–359. https://doi.org/10.1080/15374416.2022.2148255

Gaspar, M. F., Seabra-Santos, M., Relvão, J., Pimentel, M., Homem, T., Azevedo, A. F., & Moura-Ramos, M. (2024). Implementation in the "real world" of an evidence-based social and emotional learning program for teachers: Effects on children social, emotional, behavioral and problem solving skills. *Frontiers in Psychology*, *14*, Article 1198074. https://doi.org/10.3389/fpsyg.2023.1198074

Geelhoed, E., Mandzufas, J., George, P., Strahan, K., Duffield, A., Li, I., & Cross, D. (2020). Long-term economic outcomes for interventions in early childhood: Protocol for a systematic review. *BMJ Open*, *10*(8), Article e036647. https://doi.org/10.1136/bmjopen-2019-036647

Goulter, N., Hur, Y. S., Jones, D. E., Godwin, J., McMahon, R. J., Dodge, K. A., Lansford, J. E., Lochman, J. E., Bates, J. E., Pettit, G. S., & Crowley, D. M. (2024). Kindergarten conduct problems are associated with monetized outcomes in adolescence and adulthood. *Journal of Child Psychology and Psychiatry*, *65*(3), 328–339. https://doi.org/10.1111/jcpp.13837

Green, J. G., McLaughlin, K. A., Fillbrunn, M., Fukuda, M., Jackson, J. S., Kessler, R. C., Sadikova, E., Sampson, N. A., Vilsaint, C., Williams, D. R., Cruz-Gonzalez, M., & Alegría, M. (2020). Barriers to mental health service use and predictors of treatment drop-out: Racial/ethnic variation in a population-based study. *Administration and Policy in Mental Health and Mental Health Services Research*, *47*(4), 606–616. https://doi.org/10.1007/s10488-020-01021-6

Holtrop, K., Casaburo, G., Hickman, T., Yzaguirre, M. M., & Young, D. (2023). The acceptability and preliminary effectiveness of a brief, online parenting program: Expanding access to Evidence-Based parenting intervention content. *Family Process*, *62*(4), 1506–1523. https://doi.org/10.1111/famp.12883

Izett, E., Rooney, R., Prescott, S. L., De Palma, M., & McDevitt, M. (2021). Prevention of mental health difficulties for children aged 0–3 years: A review. *Frontiers in Psychology*, *11*, Article 500361. https://doi.org/10.3389/fpsyg.2020.500361

Jent, J. F., Rothenberg, W. A., Peskin, A., Acosta, J., Weinstein, A., Concepcion, R., Dale, C., Bonatakis, J., Sobalvarro, C., Chavez, F., Hernandez, N., Davis, E., & Garcia, D. (2023). An 18-week model of Parent–Child Interaction Therapy: Clinical approaches, treatment formats, and predictors of success for predominantly minoritized families. *Frontiers in Psychology*, *14*, Article 1233683. https://doi.org/10.3389/fpsyg.2023.1233683

Jeong, J., Franchett, E. E., Ramos de Oliveira, C. V., Rehmani, K., & Yousafzai, A. K. (2021). Parenting interventions to promote early child development in the first three years of life: A global systematic review and meta-analysis. *PLOS Medicine*, *18*(5), Article e1003602. https://doi.org/10.1371/journal.pmed.1003602

Joo, J. Y., & Liu, M. F. (2021). Culturally tailored interventions for ethnic minorities: A scoping review. *Nursing Open*, *8*(5), 2078–2090. https://doi.org/10.1002/nop2.733

Kaminski, J. W., & Claussen, A. H. (2017). Evidence base update for psychosocial treatments for disruptive behaviors in children. *Journal of Clinical Child and Adolescent Psychology*, *46*(4), 477–499. https://doi.org/10.1080/15374416.2017.1310044

Kapke, T. L., & Gerdes, A. C. (2016). Latino family participation in youth mental health services: Treatment retention, engagement, and response. *Clinical Child and Family Psychology Review*, *19*(4), 329–351. https://doi.org/10.1007/s10567-016-0213-2

Leijten, P., Raaijmakers, M. A. J., Orobio de Castro, B., van den Ban, E., & Matthys, W. (2017). Effectiveness of the Incredible Years Parenting Program for families with socio-economically disadvantaged and ethnic minority backgrounds. *Journal of Clinical Child and Adolescent Psychology*, *46*(1), 59–73. https://doi.org/10.1080/15374416.2015.1038823

McCabe, K. M., Yeh, M., & Zerr, A. A. (2020). Personalizing behavioral parent training interventions to improve treatment engagement and outcomes for culturally diverse families. *Psychology Research and Behavior Management*, *13*, 41–53. https://doi.org/10.2147/PRBM.S230005

Menting, A. T. A., Orobio de Castro, B., & Matthys, W. (2013). Effectiveness of the Incredible Years parent training to modify disruptive and prosocial

child behavior: A meta-analytic review. *Clinical Psychology Review*, *33*(8), 901–913. https://doi.org/10.1016/j.cpr.2013.07.006

Miami-Dade County. (n.d.). *Income limits*. Miami-Dade County Government. https://www.miamidade.gov/global/housing/income-limits.page

Mihalic, S., Irwin, K., Elliott, D., Fagan, A., & Hansen, D. (2001). *Blueprints for violence prevention*. Office of Juvenile Justice and Delinquency Prevention. https://ojjdp.ojp.gov/library/publications/blueprints-violence-prevention

Mingebach, T., Kamp-Becker, I., Christiansen, H., & Weber, L. (2018). Meta-meta-analysis on the effectiveness of parent-based interventions for the treatment of child externalizing behavior problems. *PLOS ONE*, *13*(9), Article e0202855. https://doi.org/10.1371/journal.pone.0202855

Morpeth, L., Blower, S., Tobin, K., Taylor, R. S., Bywater, T. J., Edwards, R., Axford, N., Lehtonen, M., Jones, C., & Berry, V. (2017). The effectiveness of the Incredible Years pre-school parenting programme in the United Kingdom: A pragmatic randomised controlled trial. *Child Care in Practice*, *23*(2), 141–161. https://doi.org/10.1080/13575279.2016.1264366

National Institute of Justice, Crime Solutions. (2011). *Program profile: The Incredible Years Child Training Program*. https://crimesolutions.ojp.gov/ratedprograms/194

Newberry, J. A., Gimenez, M. A., Gunturkun, F., Villa, E., Maldonado, M., Gonzalez, D., Garcia, G., Espinosa, P. R., Hedlin, H., & Kaysen, D. (2024). Mental health care-seeking and barriers: A cross-sectional study of an urban Latinx community. *BMC Public Health*, *24*(1), Article 3091. https://doi.org/10.1186/s12889-024-20533-6

Nichols, S., Dooley, K., & Soong, H. (2024). Seesawing (dis) connections: Digital parent involvement in a culturally diverse school community. *Journal of Family Diversity in Education*, *6*(2), 100–117. https://doi.org/10.53956/jfde.2024.194

Nguyen, T. T., Wallerstein, N., Das, R., Sabado-Liwag, M. D., Jernigan, V. B. B., Jacob, T., Cannady, T., Martinez, L. S., Ndulue, U. J., Ortiz, A., Dankwa-Mullan, I., Pérez-Stable, E. J., Gardner, K. L., Zhang, X., & Rosario, A. M. (2021). Conducting community-based participatory research with minority communities to reduce health disparities. In I. Dankwa-Mullan, E. J. Pérez-Stable, K. L. Gardner, X. Zhang, & A. M. Rosario (Eds.), *The science of health disparities research* (pp. 171–186). Wiley. https://doi.org/10.1002/9781119374855.ch11

Oronoz, B., Alonso-Arbiol, I., & Balluerka, N. (2007). A Spanish adaptation of the Parental Stress Scale. *Psicothema*, *19*(4), 687–692.

Quetsch, L. B., Girard, E. I., & McNeil, C. B. (2020). The impact of incentives on treatment adherence and attrition: A randomized controlled trial of Parent–Child Interaction Therapy with a primarily Latinx, low-income population. *Children and Youth Services Review*, *112*, Article 104886. https://doi.org/10.1016/j.childyouth.2020.104886

Reid, M. J., Webster-Stratton, C., & Beauchaine, T. P. (2001). Parent training in head start: A comparison of program response among African American, Asian American, Caucasian, and Hispanic mothers. *Prevention Science*, *2*(4), 209–227. https://doi.org/10.1023/A:1013618309070

Robbins, T., Stagman, S., & Smith, S. (2012). *Young children at risk: National and state prevalence of risk factors*. National Center for Children in Poverty. https://www.nccp.org

Romeo, R., Knapp, M., & Scott, S. (2006). Economic cost of severe antisocial behaviour in children—And who pays it. *The British Journal of Psychiatry*, *188*(6), 547–553. https://doi.org/10.1192/bjp.bp.104.007625

Rostad, W. L., Moreland, A. D., Valle, L. A., & Chaffin, M. J. (2018). Barriers to participation in parenting programs: The relationship between parenting stress, perceived barriers, and program completion. *Journal of Child and Family Studies*, *27*(4), 1264–1274. https://doi.org/10.1007/s10826-017-0963-6

SAS Institute, Inc. (2008). *SAS statistical software* (Version 9.2) [Computer software].

Sebastian, J., Herman, K. C., & Reinke, W. M. (2019). Do organizational conditions influence teacher implementation of effective classroom management practices: Findings from a randomized trial. *Journal of School Psychology*, *72*, 134–149. https://doi.org/10.1016/j.jsp.2018.12.008

Smokowski, P., Corona, R., Bacallao, M., Fortson, B. L., Marshall, K. J., & Yaros, A. (2018). Addressing barriers to recruitment and retention in the implementation of parenting programs: Lessons learned for effective program delivery in rural and urban areas. *Journal of Child and Family Studies*, *27*(9), 2925–2942. https://doi.org/10.1007/s10826-018-1139-8

University of Miami. (2025). *Breaking barriers in a parenting intervention*. Box. https://miami.app.box.com/s/rdjizm3l3cpevcj752lajyqs18o3ulc9

U.S. Census Bureau. (2024, September 5). *Hispanic heritage month 2024: Sept. 15–Oct. 15*. U.S. Department of Commerce. https://www.census.gov/newsroom/facts-for-features/2024/hispanic-heritage-month.html

U.S. Congress. (2018). *Family first prevention services act of 2018* (Pub. L. No. 115-123, 132 Stat. 232). https://www.congress.gov/bill/115th-congress/house-bill/1892

U.S. Department of Justice. (2000). *The Incredible Years training series*. Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. https://www.ojp.gov/pdffiles1/ojjdp/173422.pdf

Webster-Stratton, C. (2011). *The Incredible Years parents, teachers, and children's training series: Program content, methods, research, and dissemination 1980–2011*. Incredible Years. https://www.incredibleyears.com

Webster-Stratton, C., Dababnah, S., & Olson, E. (2018). The Incredible Years group-based parenting program for young children with autism spectrum disorder. In M. Siller & L. Morgan (Eds.), *Handbook of parent-implemented interventions for very young children with autism* (pp. 261–282). Springer. https://doi.org/10.1007/978-3-319-90994-3_17

Weisenmuller, C., & Hilton, D. (2021). Barriers to access, implementation, and utilization of parenting interventions: Considerations for research and clinical applications. *American Psychologist*, *76*(1), 104–115. https://doi.org/10.1037/amp0000613

Zarra-Nezhad, M., Moazami-Goodarzi, A., Muotka, J., Hess, M., Havu-Nuutinen, S., & Scheithauer, H. (2024). Differential effects of an early childhood care preventive intervention program on behavior and emotional problems. *Journal of Child and Family Studies*, *33*(2), 487–503. https://doi.org/10.1007/s10826-023-02655-4

Received January 17, 2025
Revision received May 27, 2025
Accepted May 28, 2025 ■

The Incredible Years® (IY) Parent Programs: Four Decades of Evidence-Based Parenting Support, Research, and Delivery

Jennifer Piscitello, Ph.D.,

Assistant Research Scientist

Family Translational Research Group

New York University

Jp4300@nyu.edu

Carolyn Webster-Stratton, M.S.N, M.P.H., Ph.D.

Clinical Psychologist and Professor Emeritus

University of Washington

cwebsterstratton1@icloud.com

In T. Del Vecchio, T. D., Ph.D. And Terjesen, Ph.D., Handbook of Behavioral Parent Training, American Psychological Association. (in press)

Jennifer Piscitello, Ph.D. is a Licensed Clinical Psychologist and Assistant Research Scientist at the Family Translational Research Group at New York University. She received her Ph.D. in Clinical Psychology with a specialization in child and adolescent psychology from Louisiana State University. She received extensive training in parent-based in interventions (e.g., PCIT, Behavioral Parent Training) during her clinical internship at the Mailman Center for Child Development at the Miller School of Medicine at the University of Miami. She completed a T32 postdoctoral fellowship at Florida International University under the mentorship of Dr. William E. Pelham, Jr., where she also went on to hold an appointment as a Research Assistant Professor. She was co-director of the Summer Treatment Program, and evidence-based intensive behavioral intervention for children with ADHD and related problems, as well as led numerous group parent training sessions (e.g., Incredible Years, COPE). Dr. Piscitello has over twenty publications focused on child and family mental health functioning. Her research interests focus on the transactional relation between parent and child functioning as well as the development and evaluation of assessment and intervention tools focused on children with externalizing behavior problems.

Carolyn Webster-Stratton, M.S.N., M.P.H., Ph.D. is a Licensed Clinical Psychologist, Pediatric Nurse Practitioner, and Professor Emeritus at the University of Washington (UW). She is the founder and developer of the Incredible Years® Series for Parents, Children, and Teachers. During her time at University of Washington, she was Director of the UW Parenting Clinic and Pediatric Nurse Practitioner Program. Over four decades ago, she began developing and researching the Incredible Years programs. She has conducted numerous randomized controlled group studies to evaluate the effectiveness of indicated prevention programs for promoting children's social and emotional competence, school readiness skills, and preventing conduct problems in high-risk populations. She has also evaluated the teacher, parent, and child treatment programs protocols for children diagnosed with Oppositional Defiant Disorder, ADHD, anxiety and developmental delays. She has published numerous articles and books for parents, teachers, therapists and children. She continues to do IY trainings, update programs and consult regarding research.

Abstract

In this chapter, we review the Incredible Years® (IY) parent programs (Webster-Stratton, 2011, 2015, 2021), as part of the larger comprehensive IY Series for parents, teachers and children. The IY parent programs are a set of well-established evidence-based parent-focused interventions designed to promote children's social and emotional competence and academic readiness and to reduce conduct problems in young children. With over four decades of research support, the IY parent programs have undergone considerable empirical evaluation, content updates (e.g., updated video vignettes, adaptations for specific populations), and have been identified as a gold-standard intervention for the prevention of future behavior problems in young children. The IY parent programs focus on increasing the use of positive parenting strategies, decreasing harsh discipline, and improving parent, child, and family well-being. The following chapter encompasses an overview of the IY parent programs, including its scientific foundation and theory of change, target populations, and relevant considerations when working with specific subpopulations. In addition, it focuses on session content and dosage, training, research, and considerations for future research directions. This chapter provides a thorough integration of the extensive evidence base supporting the efficacy of the IY Parent Programs with a diverse range of participants from various socioeconomic, racial, cultural, and ethnic backgrounds.

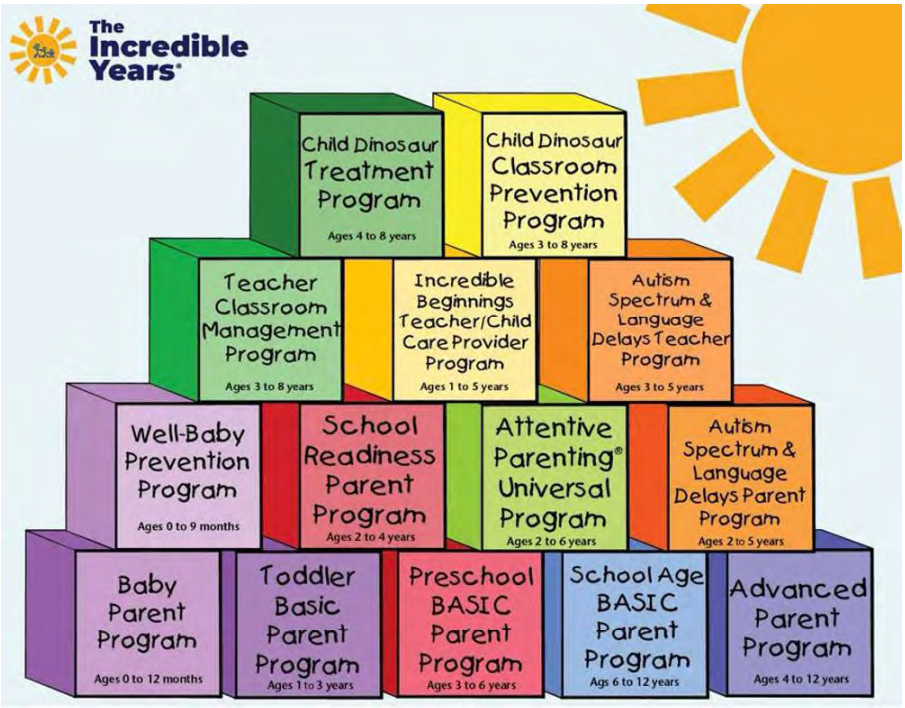
The Incredible Years® (IY) Parent Programs: Four Decades of Evidence-Based Parenting Support, Research, and Delivery

Introduction

Child behavior problems are one of the most common reasons that parents seek treatment for their children from health professionals, including pediatricians, nurses, psychologists, and psychiatrists (Danielson et al., 2021; Merikangas et al., 2011). Specifically, conduct and oppositional behavioral problems affect approximately 7.1% of children in the United States ages 3 to 17 (Ghandour et al., 2019). Such problems include a range of symptoms such as defiance, aggression, emotional dysregulation, hyperactivity, anxiety and other internalizing problems (American Psychiatric Association, 2013; Fairchild et al., 2019). Without intervention, early-onset Oppositional Defiance Disorder (ODD) commonly referred to as conduct problems are associated with increased risk for more severe behaviors in adolescence, including substance use (Howard et al., 2020), and contact with the juvenile justice system (Teplin et al., 2021). Conduct problems contribute to significant societal costs by burdening health care, juvenile justice, and education systems (Burt et al., 2018; Rivenbark et al., 2018). Moreover, conduct problems and associated behaviors are often accompanied by significant impairment at home, school, and in social relationships (e.g., with peers), with a particular strain on the parent-child relationship, such as increased conflict and parent stress (Baker-Ericzén et al., 2010). There is an extensive body of research indicating that parent training is one of the most effective evidence-based treatments for addressing child behavior problems (Kazdin & Weisz, 2017; Michelson et al., 2013).

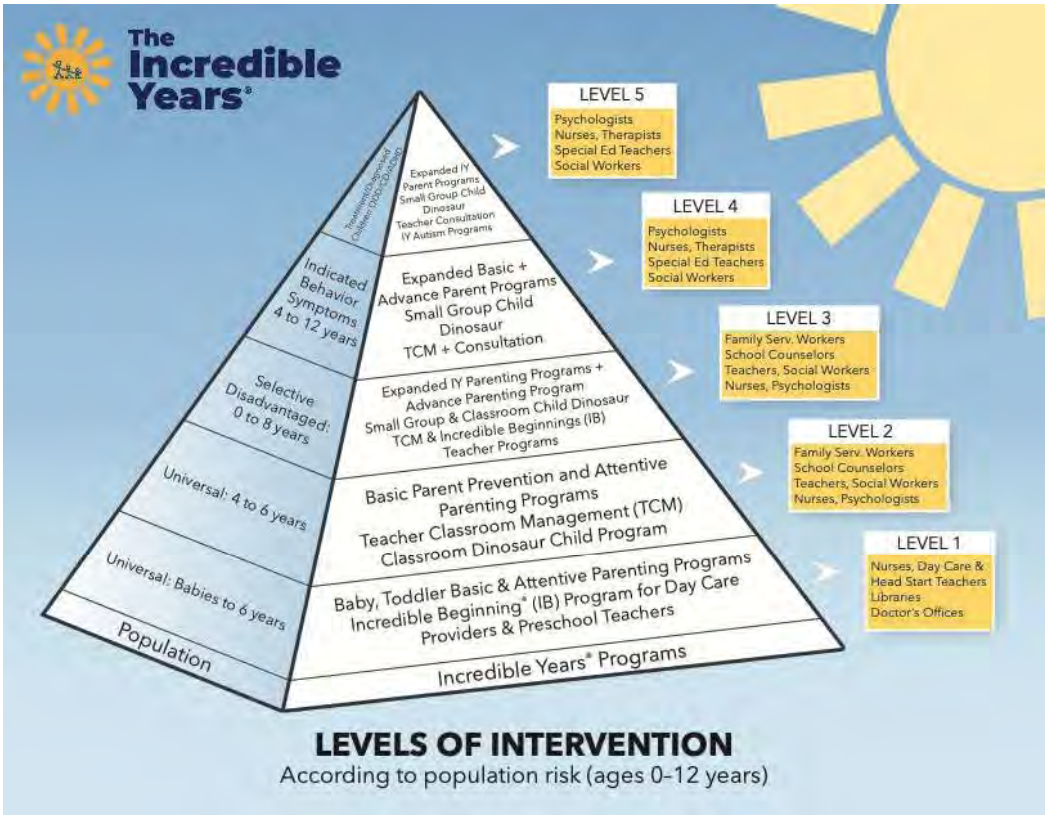
IY Program Series Overview

Figure 1. *The Incredible Years ® Series of Parent, Teacher, and Child Building Blocks for Promoting Children's Social, Emotional and Academic Skills*



Given the focus on addressing all areas in which children experience functional impairment (i.e., at home, at school, with peers), IY consists of several interlocking training programs developed for children, parents, and teachers focused on the prevention and treatment of externalizing and internalizing problems in children ranging from infancy to elementary age. An overview of the complete set of IY building blocks (i.e., including teacher, and child programs) logic model can be found at https://www.incredibleyears.com. These programs have been implemented in 26 countries worldwide. Using a multi-modal early intervention approach, IY targets child behavior problems prior to the development of more serious conduct disorders. IY addresses multiple risk factors at various ecological levels using a multi-pronged approach and consists of teacher, child, and parent programs (See Figure 1). Parent programs are represented in the bottom two levels of blocks, the third level includes teacher programs, and the top level represents child programs. There are dosage recommendations, session protocols and program choices (parent, teacher or child programs) to implement as a treatment program for children with specific diagnoses or high-risk family situations, or as prevention programs (Posthumus et al., 2012; Zhou et al., 2021). The recommended level of intervention programs based on population risk can be found in Figure 2.

Figure 2. *The Incredible Years® Levels of Intervention*



The Incredible Years® Basic Parent Programs

The Incredible Years® (IY; Webster-Stratton, 2011, 2015, 2021) series of well-established parent programs has been one of the most highly cited and researched intervention programs for young children with behavioral concerns, with over four decades of research supporting its efficacy and effectiveness in diverse populations across the United States and internationally (e.g., Gardner et al., 2010; Hutchings et al., 2008; Larsson et al., 2009; Menting et al., 2013; Pidano & Allen, 2015; Posthumus et al., 2012; Webster-Stratton et al., 2012; Webster-Stratton & Bywater, 2019). The American Psychological Association Task force has identified IY parent programs as meeting criteria for empirically supported mental health interventions for children 3-6 years old. There have been over 27 randomized controlled trials (RCTs) demonstrating the effectiveness and efficacy of the IY series, with evidence of short- and

long-term benefits for children and their families (Posthumus et al., 2012; Scott et al., 2014; Webster-Stratton et al., 2011b; Webster-Stratton & Bywater, 2019).

Theoretical Foundation

Historically, parent training programs have been based on coercion theory (Patterson, 1982) and cognitive social learning theory (Bandura, 1977). Intervention includes working with the parent to reduce challenging child behaviors and increase positive child behaviors through non-physical parenting strategies, such as positive reinforcement, removal of privileges, active ignoring, redirection, and time out. While parent training programs have been shown to be effective, there are several barriers to treatment uptake and accessibility (e.g., only offered at specialty/university clinics, cost, poor program fidelity, need for adaptation for diverse families). As such it is estimated that only a fraction of families who need services actually receive an evidence-based parent program (Chacko et al., 2016). This is particularly disconcerting given decades of research that supports their effectiveness and efficacy.

The group-based IY basic parent program was developed to improve integration of cultural factors, to reduce the cost as well as to increase the availability of parent programs in the environments where parents already seek assistance (e.g., schools, health clinics) as well as to address barriers related to equity in child mental health treatment. The IY programs are evidence-based, theory-driven programs integrating theoretical perspectives from cognitive social learning theory, coercion theory (Patterson, Reid, & Dishion, 1992), Bandura's modeling and self-efficacy theories (Bandura, 1986), Piaget's developmental cognitive learning stages and interactive learning methods (Piaget & Inhelder, 1962), self-esteem and self-confidence (Beck, 1979), attachment and relationship theory (e.g., Ainsworth, 1974), as well as collaborative therapeutic delivery processes (e.g., Webster-Stratton, 2012). IY parent programs have been well-validated and replicated among various populations in reducing risk for conduct problems in young children (Brotman et al., 2005) demonstrating both short- and long-term effects (Bywater et al., 2009) in changing parent and child behavior. Program outcomes appear to be equally beneficial for low- and high-risk families (Baydar et al., 2003) and optimal treatment outcomes have been noted when a partner is also involved with the intervention (Webster-Stratton, 1985). Finally, improvements in child

symptoms include social and emotional competence as well as those related to oppositional and conduct problems (e.g., Brotman et al., 2005; Reid et al., 2004), inattention, hyperactivity, and impulsivity (Webster-Stratton et al., 2011a; Webster-Stratton et al., 2013), and anxiety (e.g., Herman et al., 2011). The remainder of this chapter will focus on reviewing the IY parent programs in detail, as well as its various adaptations and supplements. A comprehensive review of the entire IY series, including child and teacher programs, can be found at Webster-Stratton and Bywater (2019).

IY Parent Programs

The IY series was originally developed (Webster-Stratton, 1981, 1982) to address various implementation barriers (e.g., lack of reference to cultural factors, accessibility issues, need for building support networks) through a comprehensive program that tackles multiple areas of a child's functioning (e.g., home, school, individual). To increase reach and scalability, the IY series uses video modeling and group-based interventions, online or in-person, to allow for more individuals to participate and benefit from group support. Individualized support can be added by including home-based practice with children or online intervention as needed. IY group interventions utilizing video modeling and trained group leaders have been shown to be clinically effective and cost-effective in improving child behavior problems, strengthening social support, enhancing parenting skills, and reducing stress, as well as improving parental mental health (e.g., reducing stress, depression and marital conflict; Furlong et al., 2012). This approach was informed by prior RCTs suggesting that therapist-led group discussion combined with videotape modeling are preferred by parents and facilitate ease of implementation over self-directed video tapes or group discussion alone (Webster-Stratton, 1989). Additionally, ongoing adaptations, including the tailoring of IY parent principles to parent goals, family risk factors and children's development have facilitated successful implementation and parent satisfaction (e.g., families from low SES and culturally diverse communities; e.g., Webster-Stratton, 1998b). As such, IY parent programs have been studied both as a treatment intervention for children with diagnoses and high-risk populations in educational contexts (e.g., Head Start) as well as universally as prevention intervention.

The theory of change underlying the IY Parent Programs is a cascade focused on improving - protective factors (e.g., parent responsiveness and positive parent-child-teacher interactions, added support and increased child social/emotional competence) and reducing risk factors (e.g., coercive discipline and challenging child behaviors). This in turn leads to improved child school readiness, resilience, emotion regulation, social competencies, and socially acceptable behavior in young children at home and school. In turn these proximal short term outcomes impact long-term outcomes, including reductions in risk factors such as aggressive and destructive behavior, conduct problems, depression and anxiety, school dropout, criminal activity, pregnancy, and substance abuse problems as children age into adolescence and adulthood (Webster-Stratton & Bywater, 2019). See Figure 3 for further information regarding the logical model underlying the IY parenting programs.

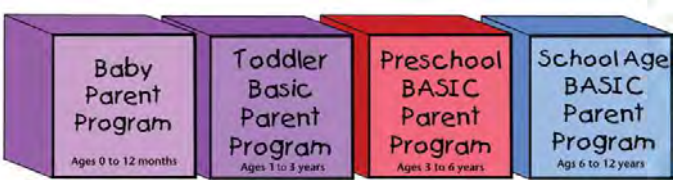
It is important to note that the IY parent programs are somewhat different from other more traditional parent training programs in the equal focus on the emotional, cognitive, and behavioral functioning of parents as well as children. The IY parent programs are delivered collaboratively with parents to ensure personalized goals are addressed and to increase parents' understanding of the underlying causes of their children's challenging behaviors (Webster-Stratton, 2012). Parents learn strategies for emotional self-regulation, how to problem solve and use the appropriate behavioral parenting tools consistent with their child's developmental level, their individual goals, and family context. They also learn how to teach their children self-regulation skills and beginning problem-solving skills by using strategies they have been modeling, prompting, coaching and practicing in daily interactions. Moreover, personalized tailoring to ensure cultural sensitivity for diverse populations is emphasized (Webster-Stratton, 2009, 2015) through the collaborative therapeutic process (Webster-Stratton, 2012, 2016). Consequently, the dosage of the program is somewhat variable based on risk factors of population addressed, children's developmental status and can be longer than some other parent programs.

Figure 3. *The Incredible Years® Parent Programs Logical Model*

The IY Basic Parenting Programs have had extensive research support of its efficacy (e.g., Gardner & Leijten et al., 2017; Kaminski & Calussen, 2017, Leijten et al., 2020; Menting et al., 2013). In addition to the developer's research in US, other independent researchers have replicated the results. Webster-Stratton and her team have conducted 13 randomized control group studies (RCTs) of the IY parenting programs (i.e., nine treatment trials and four prevention trials), with fourteen independent RCTs conducted by research groups in nine non-American countries including Canada, England, Finland, Holland, Iran, Norway, Portugal, Spain, and Wales. Additionally, the IY parenting programs have some evidence to support implementation as a universal prevention approach (Posthumus et al., 2012; Zhou et al., 2021).

Program, Content, Structure & Methods

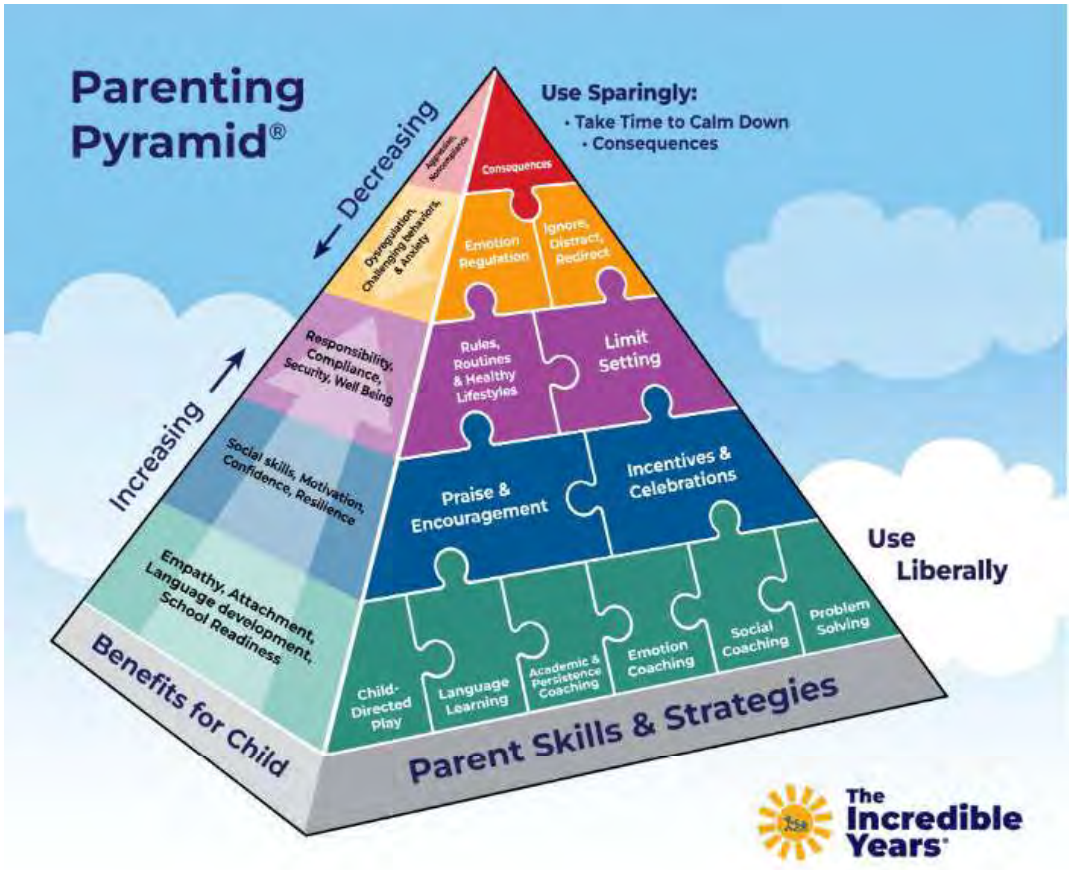
Figure 4. *The Incredible Years ® Series of Parent Building Blocks for Promoting Children's Social, Emotional and Academic Skills – Basic Parent Programs*



There are multiple versions of the Basic Parent Programs tailored to the child's developmental level: (1) baby/infant program (i.e., child(ren) aged 4 weeks to 9 months); (2) toddler program (i.e., children aged 1-3 years), (3) preschool program (i.e., children aged 3-5 years), and (4) School Age (i.e., children aged 6-12 years). These programs are depicted in Figure 4. Each of the Basic parent programs is implemented in a group format (typically consisting of 8-12 parents) and runs between 8 and 22 weeks, depending on the child's age that the program addresses and whether delivering the prevention or treatment protocol model. The parent programs use developmentally, culturally, and temperamentally

diverse video vignettes available via USB or streaming to demonstrate parenting strategies. The video vignettes serve as a discussion prompt and include examples of principles of child development and parenting that are applied to each parent's goals for themselves and their children. Parents engage in collaborative learning and problem solving through group discussion of the principle depicted in the video of the parent-child interaction. Sessions begin with enhancing the positive parent-child relationship. Through these sessions, parents learn a variety of cognitive, emotional, and behavioral skills, which can be conceptualized as a pyramid with puzzle pieces (see Figure 5).

Figure 5. *The Incredible Years® Parenting Pyramid (Version 2.0)*



The foundation of the pyramid includes core parenting puzzle pieces such as child-directed play, promoting language development, academic and persistence coaching, and emotion and social coaching, which are to be used liberally. Children benefit with enhanced empathy skills, attachment, language skills, self-esteem, cooperation, and school readiness skills. The second level of the pyramid includes coaching praise and providing encouragement and ways to implement incentives to motivate children with difficult learning tasks. Strategies from the first two levels of the pyramid are used liberally toward the parents' particular goals for their children. The third level of the pyramid focuses on strategies designed to reduce children's negative or challenging behaviors. These include parents learning how to build a safe environment with consistent routines and household rules, setting clear limits, and developing healthy lifestyles. As a result, children learn responsibility, predictability, and compliance to parent directions and household rules. The fourth level of the pyramid focuses on parents learning how to use selective attention (i.e., ignoring), distractions, and redirections to reduce minor misbehaviors. Next, parents learn how to teach their children self-regulation skills to calm down when becoming dysregulated. This is followed by the final pyramid level 5 learning when it is appropriate to use time out to calm down for aggressive behavior and the importance of giving their children time and space to calm down on their own in a safe place. In addition, parents learn about using logical and natural consequences for selected behaviors. Once the positive foundation has been strengthened in the first two levels of the pyramid, then more clear and predictable discipline strategies can be successfully implemented. The last puzzle piece of the pyramid goes back to the foundation level focusing on teaching children how to problem solve which helps parents integrate many of the puzzle piece strategies used throughout the parenting pyramid.

Adjunct Parenting Programs

Figure 6. *The Incredible Years ® Series of Parent Building Blocks for Promoting Children's Social, Emotional and Academic Skills – Adjunct Programs*

There are a number of optional adjunct programs that can be implemented either after Basic intervention as a supplement or instead of the Basic parent program for universal prevention (see Figure 6). A snapshot of these programs is provided below in Table 1. First, ADVANCE (See Figure 6) is an adjunct program that is designed to be implemented with high-risk families, such as those in which there are parents experiencing depression, stress, marital discord, child welfare involvement, and housing insecurity (Webster-Stratton, 1994). The IY School Readiness Program is intended for preschool aged children to support skills important for successful transition to school, in terms of reading literacy. To promote prevention and support children (without significant behavioral issues), the Attentive Parenting Program provides parents with learning about academic, social, emotion and persistence coaching as well as emotion self-regulation skills and problem-solving methods. The Autism Parent program focuses on preschool aged children (2-5 years) who are diagnosed with autism spectrum disorder or language delays. The IY child and teacher autism programs are considered as add-ons for higher risk children or separate programs for those with autism diagnoses or language delays. The Well-Baby Prevention Program focuses on key parenting principles for each of the well-baby visits in the first year of life (Crealey et al., 2024).

Table 1. *Brief Description of Adjunct IY Parent Programs*

Adjunct Program	When to Use	Population	Goals
ADVANCE	After the Basic preschool or school-age programs	Selective high-risk & indicated or treatment populations	Reduce parents' interpersonal risk factors (e.g., anger, depression, poor communication, lack of support, problem-solving difficulties) between parents and

			with teachers, and children's poor self-regulation skills
School Readiness Program	Adjunct to the Preschool Program	Prevention program for parents of children ages 3-4 years	Help parents support children's preliteracy and interactive reading readiness skills
Attentive Parenting Program	Booster sessions for indicated populations following Basic Toddler or Preschool parenting program completion	Prevention program for parents of children 2-6 years old without significant behavioral issues	Teach parents social, emotional, and persistence coaching, reading skills and how to promote children's self-regulation skills and problem-solving skills.
Autism Parent Program	Independently or in conjunction with the Basic Preschool program	Parents of children 2-5 years old on the autism spectrum or whose children have language delays	Promote child emotion regulation, social competence, language skills, school readiness
Well-Baby Prevention Program	Independent or in conjunction with the Baby Parent program	Parents of children 2 months old and up	Delivered in a primary care setting; Teach parents about developmental milestones, safety and preventing injury, healthy eating, and oral hygiene and promote sensitive and responsive parenting through play and communication

Training

Training, consultation, and certification are offered through IY (https:/www.incredibleyears.com) for group leaders, to ensure fidelity of program implementation (Webster-Stratton & McCoy, 2015). Group leaders consist of a variety of professional groups, such as nursing, psychology, education, social work, and medicine. In-person trainings for the Basic Parenting Programs are held over 3 to 5 days (depending on the particular training program) and online trainings are available via Zoom in 5 to 6 3-hour sessions spread out over 2 weeks. Training is also available for supplemental programs (i.e., School Age, Parent Home Visit Coaching & Online training). Ongoing peer coaching and group consultation is

recommended with an accredited IY coach or mentor to support training and certification requirements are completed.

Considerations & Adaptations for Special Populations

The IY parent programs have undergone a number of protocol revisions with new video vignettes over the last four decades and versions have been broken down for use with families of children from infancy through school-age. Although the basic program was originally developed to target behaviors associated with conduct problems (Webster-Stratton, 1990; Webster-Stratton et al., 1989), it has demonstrated efficacy within a variety of vulnerable subpopulations (e.g., parents with low engagement, families with maltreatment history and for children with internalizing behaviors) and diagnostic risk categories (e.g., ADHD, autism). Below is a review of the literature on specific populations and adaptations for implementation with these specific subpopulations.

Vulnerable Populations

Welfare Involved Families. The IY Basic Parenting program has demonstrated positive outcomes with ethnic minority and socially disadvantaged families in US and Europe (i.e., England, Finland, Ireland, Iran, Netherlands, Norway, Portugal, Scotland, Sweden and Wales; e.g., Safarpour & Ashori, 2020; Axberg & Broberg, 2012; Azevedo et al., 2013; Danbolt, 2020; Furlong et al., 2012; Hutchings et al., 2016, 2008; Karjalainen et al., 2019, 2021; McDaniel et al., 2011; Morpeth et al., 2017; Safarpou & Leijten et al., 2017; Seabra-Santos et al., 2016; for meta-analyses see: Gardner & Leijten, 2017 and Gardner et al., 2019), maltreating mothers in Canada (Hughes & Gottlieb, 2004; Letarte et al., 2010), and Head Start programs in the United States (Hurlburt et al., 2013; Webster-Stratton 1998a, 1998b; Webster-Stratton & Hammond, 1998; Webster-Stratton et al., 2001), families with maltreatment histories (Constantino et al., 2023), and families with low engagement (Webster-Stratton & Reid, 2010). Prolonged intervention (18-20 sessions) was found to be most effective for families involved in the child welfare system (Letarte et al., 2010; Karjalainen et al., 2019). Recent work, conducted in Spain with families involved in the child welfare system, evaluated the effectiveness of the IY Basic Parenting (19 sessions) plus the Small Group Dinosaur program (i.e., IY Small Group Therapeutic Child Treatment

Program) curricula via RCT (Arruabarrena et al., 2022). They found that parents in the treatment group demonstrated significantly greater improvements in positive parenting practices, inconsistent discipline, parenting stress, parent depression, and perceived child behavior problems, compared to those in the control condition. Additionally, medium to large effect sizes were found for within group changes in self-reported parenting practices, reductions in observed negative talk, parent depression, and child behavior problems.

In Finland, Karjalainen and colleagues (2019) also found improvements in behavioral problems and use of positive parenting skills in a sample of families referred to Child Protective Services (CPS) using the IY Basic Parenting Program in combination with home coaching. A total of 105 families with children aged 3-7 years participated in an RCT, where families were randomly assigned to a prolonged IY Basic Parenting Program or care as usual. The IY intervention included 19-20 group sessions (with additional time focused on building positive parent-child interactions) and four 1-1.5-hour home visits. Further evaluation of the acceptability of the program with CPS-involved parents ($N = 43$) and non-CPS-involved parents ($N = 19$), revealed similar outcomes regarding satisfaction and attendance between the groups, suggesting that the CPS-involved families similarly engaged with the program and endorsed acceptability at comparable rates (Karjalainen et al., 2020).

Two other studies evaluated the impact of the IY basic parent program for reducing re-entry of CPS referred families into protective custody. One 10-year follow-up study (2011-2021) of 272 young children incorporated delivery of the IY parent program plus parental psychiatric care, practice every 3rd parent session, and quarterly clinical appraisal. These families were compared with care as usual and showed a three to five-fold reduction in child maltreatment re-entry into protective custody compared to the care as usual condition (Constantino et al. 2023). A second study involved 736 children of families referred to CPS for abuse and neglect from 2007-2015 (Sicotte et al., 2018). The experimental group (n=368) attended the IY parent program and was compared with a matched control group (based on propensity scores). Results showed a reduction in the length of time that a child needed to receive

protective services. Not only did the IY parent program show improved parenting practices but also closed children's cases above and beyond the impact of other typical CPS intervention.

Research suggests that for families involved in the child welfare system, a prolonged intervention of at least 19-20 basic parent group sessions with either individualized home visit practice, or the IY Small Group Therapeutic Child Treatment Program, or parental psychiatric care be included in the treatment plan (Webster-Stratton, 2014; Webster-Stratton & Reid, 2010). Overall, with these supplements (Webster-Stratton & Reid, 2010, 2011), IY appears to be an effective approach for reducing child neglect and abuse and reducing time involved with CPS, thus reducing costs.

Low Parent Engagement. Engagement in parent training is particularly important for treatment outcomes (Ros et al., 2016). Parents who are experiencing significant mental health concerns (e.g., depression, substance use, stress) and environmental stressors (e.g., poverty) are at increased risk for low engagement due to practical and financial barriers (Chacko et al., 2008, 2009). Notably, all the developer's studies with high-risk families provided daycare, dinner, and transportation, as well as offered makeup sessions (Webster-Stratton, 2014). Additionally, financial incentives were implemented for Head Start families, which they received if they attended two-thirds of the recommended sessions.

Baydar and colleagues (2003) conducted a trial evaluating the basic parent program in a sample of high-risk families, that is low-income mothers whose children attended Head Start. They evaluated factors that may disrupt intervention engagement and found that 35% of the families endorsed three or more risk factors (i.e., single parenthood, depressive symptoms, anger problems, psychiatric illness, history of substance use, history of child or partner abuse). Results indicated that families who were more engaged (i.e., attended sessions consistently, completed homework between sessions, and engaged in discussion during sessions) benefited more from the IY parent program, highlighting the importance of considering these factors for implementation. Of the risk factors examined, only depression had a small negative impact on engagement. In fact, parents with increased risk factors tended to be *more* engaged in treatment than families with fewer risk factors (Baydar et al., 2003). This is consistent with another study conducted by Reid and colleagues (2004), in which high-risk mothers (i.e., those who were critical in

their interactions with their child and who had children with elevated conduct problems) were more engaged in the intervention than low-risk mothers. Engagement was directly related to treatment benefits.

Clinical Subpopulations

Attention-Deficit/Hyperactivity Disorder (ADHD). ADHD commonly co-occurs with oppositional behaviors and conduct problems (Gau et al., 2010) and impacts approximately 8-10% of children in the United States (Danielson et al., 2017). ADHD is primarily conceptualized by symptoms of inattention, impulsivity, and hyperactivity that cause impairment across settings (APA, 2013). In most IY treatment studies, approximately 40% of children with ODD also had comorbid ADHD. Several studies have demonstrated success in reducing these symptoms in preschool-aged children with an increased risk of developing ADHD (Webster-Stratton et al., 2011a; Webster-Stratton et al., 2013). For example, when the Basic Parenting Program is offered alone (Azevedo et al., 2013, 2015; Hartman et al., 2003; Jones et al., 2007) or in combination with the child program (Webster-Stratton et al., 2011a, 2013), there have been decreases in parent-reported symptoms of ADHD. One study examined the efficacy of the IY Basic Parenting Program as an early intervention for a sample of Portuguese children with elevated risk for ADHD and found medium effect sizes in parent- and teacher-reported ADHD symptoms and medium to large effect sizes for observed parenting behaviors (Azevedo et al., 2013), with maintenance up to 12 months (Azevedo et al., 2014).

Moreover, a recent study (Changing Lives Initiative™) was carried out for parents with children (3-7 years) with ADHD in Ireland and Scotland over a 3-year period 2017-2020, including during the COVID-19 pandemic (The Changing Lives Consortium, 2021). 50 IY Basic Preschool programs were delivered (20 sessions total), in person groups and online to over 2000 parents. Results showed parents reported less stress and improved disciplinary practices. They also reported consistent improvements regarding children's hyperactive and impulsive behaviors as well as their concentration, attention levels, and social skills. Levels of parent satisfaction were very high, and dropout was low. Taken together, this body of work suggests that the IY parenting program is a promising prevention and intervention approach for young children exhibiting elevated ADHD symptomatology.

Finally, research suggests that pediatric clinics can be leveraged to improve access to treatment for toddlers at-risk for developing ADHD (i.e., elevated scores on symptoms screeners). An RCT was conducted by Perrin et al. (2014) evaluating an abbreviated 10-week IY parent curriculum in 273 parents of toddlers (aged 2- to 4-years-old) with elevated risk for ADHD. The RCT was conducted at 11 pediatric clinics in the greater Boston area and parent groups were led by a research clinician and pediatric staff member. Results revealed pre- to post-treatment improvements in parenting skills and child behaviors measured via video-taped parent-child interactions and parent-report questionnaires. Positive impacts of the program were maintained at 6- and 12-month follow ups. This study supports the feasibility of implementing IY parent groups in pediatric settings; however, additional research is needed to further replicate these results, as well as to determine if this structure could also be successfully leveraged to support parents of older preschool aged children during pediatric well-visits.

Autism. Children with ASD commonly display deficits with social communication and interactions, as well as the presence of repetitive behaviors and restricted interests (APA, 2013). ASD often occurs with behavior problems (Hartley et al., 2008; Mazurek et al., 2013) and high parent stress (Estes et al., 2013; Schieve et al., 2011).

Initial studies examining the efficacy of IY parent programs with families of children with ASD, started with the Basic program (e.g., Dabanah & Parshi, 2016a). In the first feasibility study, nine parents of preschool aged children (i.e., 2-5 years old) with ASD participated in the IY Basic parent program and a multi-pronged assessment (i.e., parent report, observation, and semi-structured interviews) demonstrated positive outcomes (Hutchings et al., 2016). In another feasibility pilot trial, 17 parents of children (ages 3-6 years) with ASD participated in a 15-week Basic IY parent intervention tailored for children with ASD. Parents reported benefiting most from learning specific child emotion regulation strategies, play-based child behavior skills, parent stress management, social support, and visual resources (Dababnah & Parish, 2016a). Furthermore, parenting stress decreased significantly from baseline to post-intervention (Dababnah & Parish, 2016b). Although parents reported the program as acceptable, parents indicated that they wanted to see vignettes that were more representative of their own children.

Subsequently, Webster-Stratton developed two autism programs for parents and teachers with new content and video vignettes (IY-ASD; see Webster-Stratton et al., 2018). The IY Autism parent program is delivered in a combination of 14-18 weeks of group-based parent intervention, as well as individual home coaching as needed. It can be followed up with the 6-session group Autism program for teachers and parents working collaboratively to promote peer interactions. Content focuses on social communication, verbal and nonverbal language development, visual images, sensory adaptations, positive relationships with peers, as well as social skills, emotion- and self-regulation, and positive behavior management.

Dababnah and colleagues (2019) tested the updated IY Autism parent program in two samples of parents of preschool aged children with ASD. Of the 50 parents who initially enrolled, 42 completed the program and significant decreases in child-related parenting stress were observed from baseline to post-intervention. Another study of the IY Autism parent program was conducted as an RCT in Wales, resulting in high program satisfaction and completion rates (Williams et al., 2020). Similar results were found in a one-group pre-posttest design conducted in Palestine, with significant reductions in parent stress and improvements in parents' management skills (Wahdan et al., 2023). IY-ASD underwent an extensive qualitative evaluation in Aotearoa New Zealand, in which the parent program was administered in 12-14 weekly sessions along with a minimum of 3 home visits and was delivered across eight regions (McLay et al., 2021). Results indicated increases in parents' self-efficacy and wellbeing, including improved parent emotion regulation. Currently, the Autism parent program delivered primarily online is being researched in an RCT in Spain in three hospitals with a recent extension for children with genetic conditions (see study protocol: Serrano et al., 2024). Overall results indicate IY-ASD as a promising intervention for young children with ASD and language delays.

Future Directions

The IY parent programs continue to undergo fidelity tailoring to address the changing needs of families, as well as to ensure diverse representation. For example, currently, version 2.0 of the Preschool Basic Parenting Program is being developed by Webster-Stratton with refreshed video clips representing

more culturally diverse families (to be released in 2025). The 2.0 program still adheres to the IY Parenting Pyramid structure and content and the same IY methods and processes. 25-30% of the video clips are called “legacy vignettes” because they include the favorite video clips most commonly used in prior research and trainings. Some of the enhancements include addressing current issues such as building children’s language with give and take conversations and multi-lingual language, interactive reading approaches, assuring healthy eating and lifestyle routines, teaching children emotion self-regulation skills and beginning problem-solving skills.

Additional research focused on the combination, sequencing of different IY parent and supplemental programs, as well as the combination and sequencing of parent with teacher and child programs within the broader IY series, would be beneficial to dig even deeper into understanding what works for whom, as well as to reveal the optimal dosage for specific risk populations in obtaining the best effect sizes and maintenance. Additionally, examination of the long-term benefits (e.g., Overbeek et al., 2021; Webster-Stratton et al., 2011b), including dosage effects and the impact of booster sessions on maintenance effects for high-risk populations would be helpful to identify the most cost- and time-effective interventions for specific populations. Continued work with various subpopulations, particularly those who are more likely to drop out of treatment, would help with further adapting and personalizing engagement strategies. Furthermore, given the recent Surgeon General’s advisory focused on parenting and associated stressors as a public health crisis (Murthy, 2024), additional metrics of parent functioning may be considered to determine if parent training programs, including IY, have a positive and lasting impact on parent well-being (e.g., quality of life, physical and mental health functioning). Although research on parent outcomes associated with participating in IY consistently leads to reduced parenting stress (e.g., Dabanah & Parshi, 2016a, Lau et al, 2011, Marcynyszyn et al., 2011), examining additional facets of parent functioning may be warranted (e.g., marital conflict, financial burden associated with raising a child with behavioral and related concerns). In recent years, there has been new research supporting the IY parent program as a universal prevention approach (Posthumus et al., 2012; Zhou et al., 2021); additional work in this area is needed to fully support this notion. Particularly, the Attentive

Parenting program for children ages 2-5 years, designed as a shorter universal intervention (8 sessions), needs further study to understand its possible preventive impact. Additionally, further research is needed to examine the effectiveness of incorporating IY parent programs as a prevention approach during child well-visits in pediatric offices. Only one study has examined this to date indicating promising results (i.e., Perrin et al., 2014).

Summary and Conclusions

The number of highly controlled RCTs conducted in diverse languages, populations, and cultures, demonstrates the impact of the IY series over the last four decades on parent and child mental health. The research overwhelmingly supports the efficacy of the IY parent programs. The IY group format, tailored content and dosage, therapeutic relationship-based delivery methods and collaborative learning approaches, coupled with the clear acceptability of the program by parents cross culturally, makes the IY parent program a strong choice for implementation as a treatment or prevention approach to reducing risk of severe behavior problems in children and improving associated functional impairment and the well-being of children, parents, and families. The potential personal and societal cost savings of IY is significant, even if just one child is protected from a life of crime or criminal involvement.

References

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596.

Ainsworth, M. (1974). Infant-mother attachment and social development: Socialization as a product of reciprocal responsiveness to signals. In M. Richards (Ed.), *The integration of the child into the social world* (pp. 30-55). Cambridge University Press.

Arruabarrena, I., Rivas, G. R., Cañas, M., and Paúl, J. D. (2022). The Incredible Years parenting and child treatment programs: A randomized controlled trial in a child welfare setting in Spain. *Psychosocial Intervention, 31*(1), 43–58. https://doi.org/10.5093/pi2022a2

Axberg, U., & Broberg, A. G. (2012). Evaluation of "The Incredible Years" in Sweden: The transferability of an American parent-training program to Sweden. *Scandinavian Journal of Psychology*, *53*(3), 224-232. https://doi.org/10.1111/j.1467-9450.2012.00955.x

Azevedo, A. F., Seabra-Santos, M. J., Gaspar, M. F., & Homem, T. C. (2013). The Incredible Years basic parent training for Portuguese preschoolers with AD/HD behaviors: Does it make a difference?. *Child & Youth Care Forum, 42*, 403-424. https://doi.org/10.1007/s10566-013-9207-0

Azevedo, A. F., Seabra-Santos, M. J., Gaspar, M. F., & Homem, T. (2014). A parent-based intervention programme involving preschoolers with AD/HD behaviours: are children's and mothers' effects sustained over time? *European Child & Adolescent Psychiatry*, *23*, 437-450. https://doi.org/10.1007/s00787-013-0470-2

Azevedo, A., Seabra-Santos, M.J., Gaspar, M.F., & Homem, T. (2015). Do Portuguese preschoolers with high hyperactive behaviors make more progress than those with low hyperactivity after parental intervention? *Journal of Early Intervention, 37*(2), 119-137. https://doi.org/10.1177/1053815115598006

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1977). *Social learning theory*. Prentice-Hall.

Baker- Ericzén, M. J., Hurlburt, M. S., Brookman-Frazee, L., Jenkins, M. M., & Hough, R. L. (2010). Comparing child, parent, and family characteristics in usual care and empirically supported treatment research samples for children with disruptive behavior disorders. *Journal of Emotional and Behavioral Disorders, 18*(2), 82–99. https://doi.org/10.1177/1063426609336956

Baydar, N., Reid, M. J., & Webster-Stratton, C. (2003). The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for Head Start mothers. *Child Development*, 74(5), 1433-1453. https://doi.org/10.1111/1467-8624.00616

Beck, A. T. (1979). *Cognitive therapy and emotional disorders.* Penguin.

Brotman, L. M., Grouley, K. K., Chesir-Teran, D., Dennis, T., Klein, R. G., & Shrout, P. (2005). Prevention for preschoolers at high risk for conduct problems: Immediate outcomes on parenting practices and child social competence. *Journal of Clinical Child and Adolescent Psychology*, 34, 724-734. https://doi.org/10.1207/s15374424jccp3404_14

Burt, S. A., Hyde, L. W., Frick, P. J., Jaffee, S. R., Shaw, D. S., & Tremblay, R. (2018). Commentary: Childhood conduct problems are a public health crisis and require resources: a commentary on Rivenbark et al. (2018). *Journal of Child Psychology and Psychiatry, 59*(6), 711–713. https://doi.org/10.1111/jcpp.12930

Bywater, T., Hutchings, J., Daley, D., Whitaker, C., Jones, K., & Eames, C. (2009). Long-term effectiveness of a parenting intervention for children at risk of developing conduct disorder. *British Journal of Psychiatry*, *195*(4), 318-324. https://doi.org/10.1192/bjp.bp.108.056531

Chacko, A., Jensen, S. A., Lowry, L. S., Cornwell, M., Chimklis, A., Chan, E., Lee, D., & Pulgarin, B. (2016). Engagement in behavioral parent training: Review of the literature and implications for practice. *Clinical child and family psychology review*, *19*, 204-215. https://doi.org/10.1007/s10567-016-0205-2

Chacko, A., Wymbs, B., Flammer-Rivera, L., Pelham, W., Walker, K., Arnold, F. W., Visweswaraiah, H., Swanger-Gagne, M., Girio, E. L., Pirvics, L. L., & Herbst, L. (2008). A pilot study of the feasibility and efficacy of the Strategies to Enhance Positive Parenting (STEPP) program for single mothers of children with ADHD. *Journal of Attention Disorders, 12*(3), 270–280. https://doi.org/10.1177/1087054707306119

Chacko, A., Wymbs, B. T., Wymbs, F. A., Pelham, W. E., Swanger-Gagne, M. S., Girio, E., Pirvics, L., Herbst, L., Guzzo, J., Phillips, C., & O'Connor, B. (2009). Enhancing traditional behavioral parent training for single mothers of children with ADHD. *Journal of Clinical Child and Adolescent Psychology, 38*(2), 206–218. https://doi.org/10.1080/15374410802698388

The Changing Lives Consortium (2021). *Final report on outcomes, process and economic Evaluations*. Archways. https://changinglivesinitiative.com/about/project-report/

Constantino, J. N.,Buchanan, G.,Tandon, M., Bader, C., Jonson-Reid, M. (2023). Reducing abuse and neglect recurrence among foster children reunified with their families. *Pediatrics, 152*(3), e2022060118. https://doi.org/10.1542/peds.2022-060118

Crealey, G. E., Hickey, G., & McGilloway, S. (2024). A cost-effectiveness analysis of a universal, preventative-focused, parent and infant programme. *BMC Health Services Research*, *24*(1), 176. https://doi.org/10.1186/s12913-023-10492-w

Dababnah, S., Olson, E. M., & Nichols, H. M. (2019). Feasibility of the Incredible Years parent program for preschool children on the autism spectrum in two US

sites. *Research in Autism Spectrum Disorders*, *57*, 120-131. https://doi.org/10.1016/j.rasd.2018.10.010

Dababnah, S., & Parish, S. L. (2016a). Feasibility of an empirically based program for parents of preschoolers with autism spectrum disorder. *Autism*, *20*(1), 85-95. https://doi.org/10.1177/1362361314568900

Dababnah, S., & Parish, S. L. (2016b). Incredible Years program tailored to parents of preschoolers with autism: Pilot results. *Research on Social Work Practice*, *26*(4), 372-385. https://doi.org/10.1177/1049731514558004

Danbolt, A. M. V. (2020). Cultural responsiveness in the Incredible Years parenting programme for refugees: A case study. *International Journal of Child Care and Education Policy*, *14*(1), 6. https://doi.org/10.1186/s40723-020-00071-5

Danielson, M. L., Bitsko, R. H., Ghandour, R. M., Holbrook, J. R., Kogan, M. D., & Blumberg, S. J. (2018). Prevalence of parent-reported ADHD diagnosis and associated treatment among U.S. children and adolescents, 2016. *Journal of Clinical Child & Adolescent Psychology, 47*(2), 199–212. https://doi.org/10.1080/15374416.2017.1417860.

Danielson, M. L., Bitsko, R. H., Holbrook, J. R., Charania, S. N., Claussen, A. H., McKeown, R. E., E., Cuffe, S. P., Owens, J. S., Evans, S. W., Kubicek, L., & Flory, K. (2021). Community-based prevalence of externalizing and internalizing disorders among school-aged children and adolescents in four geographically dispersed school districts in the United States. *Child Psychiatry & Human Development*, *52*, 500-514. https://doi.org/10.1007/s10578-020-01027-z

Estes, A., Olson, E., Sullivan, K., Greenson, J., Winter, J., Dawson, G., & Munson, J. (2013). Parenting-related stress and psychological distress in mothers of toddlers with autism spectrum disorders. *Brain and Development*, *35*(2), 133-138. https://doi.org/10.1016/j.braindev.2012.10.004

Fairchild, G., Hawes, D. J., Frick, P. J., Copeland, W. E., Odgers, C. L., Franke, B., Freitag, C. M., & De Brito, S. A. (2019). Conduct disorder. *Nature Reviews Disease Primers, 5*(1), 1-25. https://doi.org/10.1038/s41572-019-0095-y.

Furlong, M., McGilloway, S., Bywater, T., Hutchings, J., Smith, S. M., & Donnelly, M. (2012). Behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems in children aged 3 to 12 years. *Campbell Systematic Reviews*, *8*(1), 1-239. https://doi.org/10.4073/csr.2012.12

Gardner, F., Hutchings, J., Bywater, T., & Whitaker, C. (2010). Who benefits and how does it work? Moderators and mediators of outcome in an effectiveness trial of a parenting intervention. *Journal of Clinical Child & Adolescent Psychology, 39*(4), 568-580. https://doi.org/10.1080/15374416.2010.486315

Gardner, F., & Leijten, P. (2017). Incredible Years parenting interventions: current effectiveness research and future directions. *Current Opinion in Psychology, 15*, 99-104. https://doi.org/10.1016/j.copsyc.2017.02.023

Gardner, F., Leijten, P., Harris, V., Mann, J., Hutchings, J., Beecham, J., Bonin, E. M., Berry, V., McGilloway, S., Gaspar, M., Seabra-Santos, M. J., Orobio de Castro, B., Menting, A., Williams, M., Axberg, U., Morch, W. T., Scott, S., & Landau, S. (2019). Equity effects of parenting interventions for child conduct problems: A pan-European individual participant data meta-analysis. *The Lancet Psychiatry, 6*(6), 518-527. https://doi.org/10.1016/S2215-0366(19)30162-2

Gau, S. S., Ni, H. C., Shang, C. Y., Soong, W. T., Wu, Y. Y., Lin, L. Y., & Chiu, Y. N. (2010). Psychiatric comorbidity among children and adolescents with and without persis- tent attention-deficit hyperactivity disorder. *The Australian and New Zealand Journal of Psychiatry, 44*(2), 135–143. https://doi.org/10.3109/00048670903282733.

Ghandour, R. M., Sherman, L. J., Vladutiu, C. J., Ali, M. M., Lynch, S. E., Bitsko, R. H., & Blumberg, S. J. (2019). Prevalence and treatment of depression, anxiety, and conduct

problems in US children. *The Journal of pediatrics*, *206*, 256-267. https://doi.org/10.1016/j.jpeds.2018.09.021

Hartley, S. L., Sikora, D. M., & McCoy, R. (2008). Prevalence and risk factors of maladaptive behaviour in young children with autistic disorder. *Journal of Intellectual Disability Research*, *52*(10), 819-829. https://doi.org/10.1111/j.1365-2788.2008.01065.x

Hartman, R.R., Stage, S.A., & Webster-Stratton, C. (2003). A growth curve analysis of parent training outcomes: Examining the influence of child risk factors (inattention, impulsivity, and hyperactivity problems), parental and family risk factors. *Journal of Child Psychology and Psychiatry, 44*(3), 388-389. https://doi.org/10.1111/1469-7610.00129

Herman, K. C., Borden, L. A., Reinke, W. M., & Webster-Stratton, C. (2011). The impact of the Incredible Years parent, child, and teacher training programs on children's co-occurring internalizing symptoms. *School Psychology Quarterly, 26*(3), 189-201. https://doi.org/10.1037/a0025228

Howard, A. L., Kennedy, T. M., Mitchell, J. T., Sibley, M. H., Hinshaw, S. P., Arnold, L. E., Roy, A., Stehli, A., Swanson, J. M., & Molina, B. S. G. (2020). Early substance use in the pathway from childhood attention-deficit/hyperactivity disorder (ADHD) to young adult substance use: Evidence of statistical mediation and substance specificity. *Psychology of Addictive Behaviors, 34*(2), 281–292. https://doi.org/10.1037/adb0000542

Hughes, J. R., & Gottlieb, L. N. (2004). The effects of the Webster-Stratton parenting program on maltreating families: Fostering strengths. *Child Abuse and Neglect, 28*(10), 1081-1097. https://doi.org/10.1016/j.chiabu.2004.02

Hurlburt, M. S., Nguyen, K., Reid, J., Webster-Stratton, C., & Zhang, J. (2013). Efficacy of the Incredible Years group parent program with families in Head Start who self-reported a

history of child maltreatment. *Child Abuse and Neglect, 37*(8), 531-543. https://doi.org/10.1016/j.chiabu.2012.10.008

Hutchings, J., Bywater, T., Eames, C., & Martin, P. (2008). Implementing child mental health interventions in service settings: Lessons from three pragmatic randomised controlled trials in Wales. *Journal of Children's Services, 3*(2), 17-27. https://doi.org/10.1108/17466660200800009

Hutchings, J., Pearson-Blunt, R., Pasteur, M. A., Healy, H., & Williams, M. E. (2016). A pilot trial of the Incredible Years® Autism Spectrum and Language Delays Programme. *Good Autism Practice (GAP)*, *17*(1), 15-22. http://www.ingentaconnect.com/contentone/bild/gap/2016/00000017/00000001/art00003

Jones, K., Daley, D., Hutchings, J., Bywater, T., & Eames, C. (2007). Efficacy of the Incredible Years basic parent training program as an early intervention for children with conduct problems and ADHD. *Child: Care, Health and Development, 33*(6), 749-756. https://doi.org/10.1111/j.1365-2214.2007.00747.x

Kaminski, J. W., & Claussen, A. H. (2017). Evidence base update for psychosocial treatments for disruptive behaviors in children. *Journal of Clinical Child and Adolescent Psychology, 46*(4), 477-499. https://doi.org/10.1080/15374416.2017.1310044

Karjalainen, P., Kiviruusu, O., Santalahti, P., & Aronen, E. T. (2021). Parents' perceptions of a group-based parenting programme in families with child protection and other family support services in a real-life setting. *Child & Family Social Work, 26*, 38-49. https://doi.org/10.1111/cfs.12787

Karjalainen, P., Kiviruusu, O., Aronen, E. T., & Santalahti, P. (2019). Group-based parenting program to improve parenting and children's behavioral problems in families using special services: A randomized controlled trial in a real-life setting. Children and Youth Services Review, 96, 420-429. https://doi.org/10.1016/j.childyouth.2018.12.004

Kazdin, A. E., & Weisz, J. R. (2017). *Evidence-based psychotherapies for children and adolescents* (3rd ed.). The Guilford Press.

Larsson, B., Fossum, S., Clifford, G., Drugli, M. B., Handegård, B. H., & Mørch, W. T. (2009). Treatment of oppositional defiant and conduct problems in young Norwegian children: Results of a randomized controlled trial. *European Child and Adolescent Psychiatry, 18*(1), 42-52. https://doi.org/10.1007/s00787-008-0702-z

Leijten, P., Scott, S., Landau, S., Harris, V., Mann, J., Hutchings, J., Beecham, J., & Gardner, F. (2020). Individual participant data meta-analysis: Impact of conduct problem severity, comorbid attention-deficit/hyperactivity disorder and emotional problems, and maternal depression on parenting program effects. *Journal of the American Academy of Child and Adolescent Psychiatry, 59*(8), 933-943. https://doi.org/10.1016/j.jaac.2020.01.023

Letarte, M. J., Normandeau, S., & Allard, J. (2010). Effectiveness of a parent training program "Incredible Years" in a child protection service. *Child Abuse and Neglect, 34*(4), 253–261. https://doi.org/10.1016/j.chiabu.2009.06.003

Marcynyszyn, L. A., Maher, E. J., & Corwin, T. W. (2011). Getting with the (evidence-based) program: An evaluation of the Incredible Years Parenting Training Program in child welfare. *Children and Youth Services Review*, *33*(5), 747-757. https://doi.org/10.1016/j.childyouth.2010.11.021

Mazurek, M. O., Kanne, S. M., & Wodka, E. L. (2013). Physical aggression in children and adolescents with autism spectrum disorders. *Research in Autism Spectrum Disorders*, *7*(3), 455-465. https://doi.org/10.1016/j.rasd.2012.11.004

McDaniel, B., Braiden, H. J., Onyekwelu, J., Murphy, M., & Regan, H. (2011). Investigating the effectiveness of the Incredible Years basic parenting programme for foster carers in Northern Ireland. *Child Care in Practice*, *17*(1), 55-67. https://doi.org/10.1080/13575279.2010.522979

McLay, L., Swit, C., Blampied, N., McIlroy, A., & Sutehrland, D. (2021). *Incredible Years Autism – Parent and teacher training programmes: Evaluation report.* University of Canterbury.

Menting, A. T. A., Orobio de Castro, B., & Matthys, W. (2013). Effectiveness of the Incredible Years parent training to modify disruptive and prosocial child behavior: A meta-analytic review. *Clinical Psychology Review, 33*(8), 901-913. https://doi.org/10.1016/j.cpr.2013.07.006

Merikangas, K. R., He, J. P., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., Georgiades, K., Heaton, L., Swanson, S., & Olfson, M. (2011). Service utilization for lifetime mental disorders in US adolescents: results of the National Comorbidity Survey–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, *50*(1), 32-45. https://doi.org/10.1016/j.jaac.2010.10.006

Michelson, D., Davenport, C., Dretzke, J., Barlow, J., & Day, C. (2013). Do evidence-based interventions work when tested in the "real world?" A systematic review and meta-analysis of parent management training for the treatment of child disruptive behavior. *Clinical Child and Family Psychology Review, 16*(1), 18–34. https://doi.org/10.1007/s10567-013-0128-0

Morpeth, L., Blower, S., Tobin, K., Taylor, R. S., Bywater, T., Edwards, R. T., Axford, N., Lehtonen, M., Jones, C., & Berry, V. (2017). The effectiveness of the Incredible Years pre-school parenting programme in the United Kingdom: A pragmatic randomised controlled trial. *Child Care in Practice*, *23*(2), 141-161. https://doi.org/10.1080/13575279.2016.1264366

Murthy, V. (2024). *Parents under pressure: The US Surgeon General's advisory on the mental health & well-being of parents.* U.S. Surgeon General. https://www.hhs.gov/sites/default/files/parents-under-pressure.pdf

Overbeek, G., Van Aar, J., De Castro, B. O., Matthys, W., Weeland, J., Chhangur, R. R., & Leijten, P. (2021). Longer-term outcomes of the Incredible Years parenting intervention. *Prevention Science*, *22*, 419-431. https://doi.org/10.1007/s11121-020-01176-6

Patterson, G. R. (1982). *Coercive family process.* Eugene, OR: Castalia.

Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys: A social interactional approach* (Vol. 4). Castalia.

Perrin, E. C., Sheldrick, R. C., McMenamy, J. M., Henson, B. S., & Carter, A. S. (2014). Improving parenting skills for families of young children in pediatric settings: A randomized clinical trial. JAMA pediatrics, 168(1), 16-24. https://doi.org/10.1001/jamapediatrics.2013.2919

Piaget, J., & Inhelder, B. (1962). *The psychology of the child.* Basic Books.

Pidano, A. E., & Allen, A. R. (2015). The Incredible Years Series: A review of the independent research base. *Journal of Child and Family Studies, 24(*7), 1898-1916. https://doi.org/10.1007/s10826-014-9991-7

Posthumus, J. A., Raaijmakers, M. A. J., Maassen, G. H., Van Engeland, H., & Matthys, W. (2012). Sustained effects of incredible years as a preventive intervention in preschool children with conduct problems. *Journal of Abnormal Child Psychology, 40*(4), 487-500. https://doi.org/10.1007/s10802-011-9580-9

Reid, M. J., Webster-Stratton, C., & Baydar, N. (2004). Halting the development of conduct problems in Head Start children: The effects of parent training. *Journal of Clinical Child and Adolescent Psychology*, *33*(2), 279-291. https://doi.org/10.1207/s15374424jccp3302_10

Rivenbark, J. G., Odgers, C. L., Caspi, A., Harrington, H., Hogan, S., Houts, R. M., Poulton, R., & Moffitt, T. E. (2018). The high societal costs of childhood conduct problems: Evidence from administrative records up to age 38 in a longitudinal birth cohort.

*Journal of Child Psychology and Psychiatry, and Allied Disciplines, 59(*6), 703–710. https://doi.org/10.1111/jcpp.12850

Ros, R., Hernandez, J., Graziano, P. A., & Bagner, D. M. (2016). Parent training for children with or at risk for developmental delay: The role of parental homework completion. *Behavior therapy*, *47*(1), 1-13. https://doi.org/10.1016/j.beth.2015.08.004

Safarpour, F., & Ashori, M. (2020). Investigating the effect of Incredible Years program training on self-efficacy in mothers of deaf children*. Research in Cognitive and Behavioral Sciences, 10*(1), 21-32. https://doi.org/10.22108/cbs.2021.126699.1479

Schieve, L. A., Boulet, S. L., Kogan, M. D., Yeargin-Allsopp, M., Boyle, C. A., Visser, S. N., Blumberg, S. J., & Rice, C. (2011). Parenting aggravation and autism spectrum disorders: 2007 National Survey of Children's Health. *Disability and Health Journal*, *4*(3), 143-152. https://doi.org/10.1016/j.dhjo.2010.09.002

Scott, S., Briskman, J., & O'Connor, T. G. (2014). Early prevention of antisocial personality: Long-term follow-up of two randomized controlled trials comparing indicated and selective approaches. *American Journal of Psychiatry, 171*(6), 649-657. https://doi.org/10.1176/appi.ajp.2014.13050697

Seabra-Santos, M. J., Gaspar, M. F., Azevedo, A. F., Homem, T. C., Guerra, J., Martins, V., Leitão, S., Pimentel, M., Almeida, M., & Moura-Ramos, M. (2016). Incredible Years parent training: What changes, for whom, how, and for how long? *Journal of Applied Developmental Psychology*, *44*, 93-104. https://doi.org/10.1016/j.appdev.2016.04.004

Serrano, M., Elias, M., Llorens, M., Bolasell, M., Vall-Roqué, H., & Villalta, L. (2024). Early treatment for children with mental health problems and genetic conditions through a parenting intervention (The GAP): Study protocol for a pragmatic randomized controlled trial. *Trials*, *25*(1), 496. https://doi.org/10.1186/s13063-024-08278-4

Sicotte, R., Letarte, M. J., Hélie, S., & Mallette, I. A. L. (2018). Moderating role of the form of maltreatment experienced by children on the effectiveness of a parent training

program. *Child maltreatment*, *23*(4), 334-343. https://doi.org/10.1177/1077559518790695

Teplin, L. A., Potthoff, L. M., Aaby, D. A., Welty, L. J., Dulcan, M. K., & Abram, K. M. (2021). Prevalence, comorbidity, and continuity of psychiatric disorders in a 15-year longitudinal study of youths involved in the juvenile justice system. *JAMA pediatrics*, *175*(7), e205807-e205807. https://doi.org/10.1001/jamapediatrics.2020.5807

Webster-Stratton, C. (1981). Modification of mothers' behaviors and attitudes through a videotape modeling group discussion program. *Behavior Therapy, 12*(5), 634-642. https://doi.org/10.1016/S0005-7894(81)80135-9

Webster-Stratton, C. (1982). The long-term effects of a videotape modeling parent-training program: Comparison of immediate and 1-year follow-up results. *Behavior Therapy, 13*(5), 702-714. https://doi.org/10.1016/S0005-7894(82)80026-9

Webster-Stratton, C. (1985). The effects of father involvement in parent training for conduct problem children. *Journal of Child Psychology and Psychiatry, 26(5),* 801-810. https://doi.org/10.1111/j.1469-7610.1985.tb00593.x

Webster-Stratton, C. (1989). Systematic comparison of consumer satisfaction of three cost-effective parent training programs for conduct problem children. *Behavior Therapy, 20*(1), 103-115. https://doi.org/10.1016/S0005-7894(89)80121-2

Webster-Stratton, C. (1990). Long-term follow-up of families with young conduct problem children: From preschool to grade school. *Journal of Clinical Child Psychology, 19(2),* 144-149. https://doi.org/10.1207/s15374424jccp1902_6

Webster-Stratton, C. (1994). Advancing videotape parent training: A comparison study. *Journal of Consulting and Clinical Psychology, 62(3),* 583-593. https://doi.org/10.1037/0022-006X.62.3.583

Webster-Stratton, C. (1998a). Parent training with low-income families: Promoting parental engagement through a collaborative approach. In Lutzker, J.R. (Ed.) *Handbook of child abuse research and treatment* (pp. 183-210). Springer.

Webster-Stratton, C. (1998b). Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology, 66(5),* 715-730. https://doi.org/10.1037/0022-006X.66.5.715

Webster-Stratton, C. (2009) Affirming diversity: Multi-cultural collaboration to deliver the Incredible Years Parent Programs. *The International Journal of Child Health and Human Development, 2*(1), 17-32.

Webster-Stratton, C. (2011). *The Incredible Years parents, teachers, and children's training series: Program content, methods, research and dissemination 1980-2011*. Incredible Years Inc.

Webster-Stratton, C. (2012). *Collaborating with Parents to Reduce Children's Behavior Problems: A Book for Therapists Using the Incredible Years Programs.* Seattle, WA. Incredible Years Inc.

Webster-Stratton, C. (2014). Incredible Years parent and child programs for maltreating families. In Timmer, S. & Urquiza, A. (Eds.), *Evidence-based approaches for the treatment of maltreated children* (pp. 81-104). Springer. https://doi.org/10.1007/978-94-007-7404-9_6

Webster-Stratton, C. (2015). The Incredible Years Parent Program: The methods and principles that support fidelity of program delivery. In Ponzetti, J. (Ed.) *Evidence-based Parenting Education: A Global Perspective* (pp. 143-160). Routledge.

Webster-Stratton, C. (2016). The Incredible Years Series: A developmental approach. In Van Ryzin, M.J., Kumpfer, K., Fosco, G. M. & Greenberg, M. T. (Eds.) *Family-based prevention programs for children and adolescents: Theory, research and large-scale dissemination* (pp.42-67). Psychology Press.

Webster-Stratton, C. (2021). The Incredible Years parent, teacher and child programs: Foundations and future. In M. E. Feinberg (Ed.), *Designing evidence-based public health and prevention programs. Expert program developers explain the science and art* (pp. 57-71). Routledge.

Webster-Stratton, C., & Bywater, T. (2019). The Incredible Years® series: An internationally evidenced multimodal approach to enhancing child outcomes. In Fiese, B.H., Celano, M., Deater-Deckard, K., Jouriles, E. N., & Whisman, M. A. (Eds.), *APA handbook of contemporary family*

psychology: Family therapy and training (pp. 343–359). American Psychological Association. https://doi.org/10.1037/0000101-021

Webster-Stratton, C., Dababnah, S., & Olson, E. (2018). The Incredible Years® group-based parenting program for young children with autism spectrum disorder. In Siller, M., & Morgan, L. (Eds.) *Handbook of parent-implemented interventions for very young children with autism* (pp.261-282). Springer.

Webster-Stratton, C., & Hammond, M. (1998). Conduct problems and level of social competence in Head Start children: Prevalence, pervasiveness, and associated risk factors. *Clinical Child and Family Psychology Review*, *1*, 101-124. https://doi.org/10.1007/978-3-319-90994-3_17

Webster-Stratton, C., Hollinsworth, T., & Kolpacoff, M. (1989). The long- term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. *Journal of Consulting and Clinical Psychology, 57(4),* 550-553. https://doi.org/10.1037/0022-006X.57.4.550

Webster-Stratton, C., Gaspar, M. F., & Seabra-Santos, M. J. (2012). Incredible Years® parent, teachers and children's series: Transportability to Portugal of early intervention programs for preventing conduct problems and promoting social and emotional competence. *Psychosocial Intervention, 21*(2), 157-169. https://doi.org/10.5093/in2012a15

Webster-Stratton, C., & McCoy, K. P. (2015). Bringing The Incredible Years® programs to scale. In K. P. McCoy & A. Diana (Eds.), The science, and art, of program dissemination: Strategies, successes, and challenges. *New Directions for Child and Adolescent Development, 149*, 81–95. https://doi.org/10.1002/cad.20115

Webster-Stratton, C., & Reid, M. J. (2010). Adapting The Incredible Years, an evidence-based parenting programme, for families involved in the child welfare system. *Journal of Children's Services, 5*(1), 25-42. https://doi.org/10.5042/jcs.2010.0115

Webster-Stratton, C., Reid, M. J., & Beauchaine, T. P. (2011a). Combining parent and child training for young children with ADHD. *Journal of Clinical Child and Adolescent Psychology, 40(2),* 1-13. https://doi.org/10.1080/15374416.2011.546044

Webster-Stratton, C., Reid, M. J., & Beauchaine, T. P. (2013). One-year follow-up of combined parent and child intervention for young children with ADHD. *Journal of Clinical Child and Adolescent Psychology, 42*(2), 251-261. https://doi.org/10.1080/15374416.2012.723263

Webster-Stratton, C., Rinaldi, J., & Reid, J. M. (2011b). Long-term outcomes of incredible years parenting program: Predictors of adolescent adjustment. *Child and Adolescent Mental Health, 16*(1), 38- 46. https://doi.org/10.1111/j.1475-3588.2010.00576.x

Wahdan, M. M., Malak, M. Z., Al-Amer, R., Ayed, A., Russo, S., & Berte, D. Z. (2023). Effect of incredible years autism spectrum and language delays (IY-ASD) program on stress and behavioral management skills among parents of children with autism spectrum disorder in Palestine. *Journal of Pediatric Nursing*, *72*, 45-52. https://doi.org/10.1016/j.pedn.2023.03.018

Williams, M. E., Hastings, R. P., & Hutchings, J. (2020). The incredible years autism spectrum and language delays parent program: A pragmatic, feasibility randomized controlled trial. *Autism Research*, *13*(6), 1011-1022. https://doi.org/10.1002/aur.2265

Zhou, X., Lee, R. M., & Ohm, J. (2021). Evaluating the feasibility of the Incredible Years Attentive Parenting Program as universal prevention for racially diverse populations. *Journal of Prevention and Health Promotion*, *2*(1), 32-56. https://doi.org/10.1177/2632077020976401

Journal Pre-proofs

Implementation of the incredible years-ASLD® program in autism and preterm children with communication and/or socialization difficulties in Spain (FIRST STEPS): a feasibility study

Laia Villalta, María Elias, Marta Llorens, Helena Vall-Roqué, Marina Romero-González, Fátima Valencia-Agudo

PII: S0190-7409(25)00305-6
DOI: https://doi.org/10.1016/j.childyouth.2025.108422
Reference: CYSR 108422

To appear in: *Children and Youth Services Review*

Received Date: 25 October 2024
Revised Date: 1 June 2025
Accepted Date: 20 June 2025

Please cite this article as: L. Villalta, M. Elias, M. Llorens, H. Vall-Roqué, M. Romero-González, F. Valencia-Agudo, Implementation of the incredible years-ASLD® program in autism and preterm children with communication and/or socialization difficulties in Spain (FIRST STEPS): a feasibility study, *Children and Youth Services Review* (2025), doi: https://doi.org/10.1016/j.childyouth.2025.108422

TITLE PAGE

Title

Implementation of the Incredible Years-ASLD® program in autism and preterm children with communication and/or socialization difficulties in Spain (FIRST STEPS): a feasibility study.

Author names and affiliations

Laia Villalta[a,b], María Elias[a], Marta Llorens[a,c], Helena Vall-Roqué[b], Marina Romero-González*[d,e1], Fátima Valencia-Agudo*[f,g]

[a] Department of Child and Adolescent Mental Health, Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain; [b] Child and Adolescent Mental Health Research Group, Institut de Recerca Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain; [c] Department of Psychiatry and Legal Medicine, Universitat Autònoma de Barcelona. Cerdanyola Del Vallès, Spain; [d] Child and Adolescent Mental Health Unit, Hospital Regional e Universitario de Málaga, Spain; [e] Department of Brain Health, CIMES, Faculty of Medicine-IBIMA, UMA, Málaga, Spain; [f] Department of Child and Adolescent Psychiatry, Institute of Psychiatry and Mental Health, Hospital General Universitario Gregorio Marañón, Madrid, Spain; [g] Child and Adolescent Mental Health Centre, Central University Hospital of Asturias, Oviedo, Spain.

*These two authors contributed equally to this work, so they share the 'last author' credit.

[1]**Corresponding author:** Dr. Marina Romero-González. marinarglez@gmail.com

HIGHLIGHTS

- An early-intervention program for parents of children with communication or socialization difficulties is feasible to implement within the Spanish public system.
- Most parents adhered to the intervention.
- Parents were satisfied with the intervention.
- The online format of the intervention was rated as helpful.

Title

Implementation of the Incredible Years-ASLD® program in autism and preterm children with communication and/or socialization difficulties in Spain (FIRST STEPS): a feasibility study.

ABSTRACT

Objective: To examine the feasibility of delivering the Incredible Years® Autism Spectrum and Language Delays (IY-ASLD®) parenting program within the Spanish child mental health services. **Method:** Parents of children aged 2-5 with autism spectrum disorder (ASD) or preterm children with communication and/or socialization difficulties were recruited and randomized to intervention or treatment-as-usual (TAU) group. Participants were recruited from child and adolescent mental health services from three hospitals in Spain. A multicenter, pilot randomized controlled trial was conducted. The intervention was conducted mostly online due to the COVID-19 pandemic. **Results:** Fifty-three family units were randomized to intervention (n=28) or TAU (n=25) group. In the intervention group, twenty-three family units (82%) completed the program. Parents attended 76% of sessions on average. Fidelity of delivery was high (93.4%). Parents reported satisfaction levels above 6 out of 7 in all program-related characteristics: overall program, teaching format, specific techniques, group leaders and group of parents. The online format was also rated as very helpful quantitatively and qualitatively. **Conclusions:** The IY-ASLD® program is a well-accepted and satisfactory early intervention for parents of children with neurodevelopmental problems, and it is feasible to implement it within the Spanish Public Mental Health System. Further studies should assess the effectiveness of the intervention.

Keywords: Autism, premature birth, parent-based interventions, early interventions, randomized controlled trial.

INTRODUCTION

Autism spectrum disorder (ASD) is a neurodevelopmental disorder involving social communication disturbances and a restricted pattern of interests, often present before age 3 (American Psychiatric Association, 2013). The prevalence of ASD is particularly high in children with other neurodevelopmental difficulties, such as in the preterm population, with rates of 6-7% of children meeting full criteria for ASD (Agrawal et al., 2018; Crump et al., 2021).

In the Spanish setting, resources are scarce to intervene with ASD, but even more so with children with neurodevelopmental difficulties, not meeting full ASD criteria. This is the case of preterm children, who usually present neurodevelopmental deficits not reaching the threshold for an ASD diagnosis, such as language delay, restricted social interaction and difficulties in understanding the social context (Cogley et al., 2021; Harel-Gadassi et al., 2018; Stanley et al., 2000). A dimensional approach in early stages enables all affected children to be reached beyond specific diagnostic categories, providing the opportunity to enhance their trajectories in key developmental periods. This dimensional perspective is gaining acceptance due to its pragmatic and clinical implications (Astle et al., 2022; Finlay-Jones et al., 2019).

Children with neurodevelopmental disorders present a broad range of difficulties, such as language delay, social deficits and high levels of comorbidity, including internalizing and externalizing disorders (Arpi & Ferrari, 2013; Micai et al., 2023). In ASD in particular, a recent meta-analysis of comorbidities found a prevalence of 37% of ADHD, 35% of anxiety disorder and 28% of disruptive behavior (Micai et al., 2023).

Early parent-mediated interventions and naturalistic developmental behavioral interventions can have a positive effect on improving a broad range of developmental domains, even though a more nuanced and cautious view of the impact of interventions is still needed (Daniolou et al., 2022; Sandbank et al., 2023). The good practice guidelines for the treatment of ASD published by the Institute of Health Carlos III recommends the involvement of parents in therapy (Fuentes-Biggi et al., 2006). A review of evidence-based treatments published in Spain also highlighted the importance of training parents to stimulate ASD children in their natural environment (Fonseca Pedrero, 2021). However, parents rarely have access to this sort of interventions in the Spanish Public Health System.

Moreover, parents of children with ASD suffer from high levels of parental stress and psychological distress (Estes et al., 2009), and multiple factors are involved in parenting stress (Chen et al., 2022). In turn, parental stress, anxiety and depression can negatively impact on children's development and mental health (Romero-González et al., 2021; Woythaler 2019), dampen parenting capacity (Benson et al, 2009) and lower the effectiveness of interventions (Osborne et al., 2008). This is significant for parents of children with ASD or preterm birth, whose care can be particularly stressful (Bonis, 2016; Kynø et al., 2013). These parents are at higher risk of isolation during the first years of their children's life (Nicolaou et al., 2009), and they have a particular need for social support and group interventions (Hastings et al., 2005; Herring et al., 2006). Thus, it is of major concern to empower these parents in their task of supporting their children's development (Webster-Stratton et al., 2018; Treyvaud et al., 2009).

Group interventions involving parents, such as the Incredible Years® parenting programs (Webster-Stratton, 2001), are valuable resources in this regard and are recommended by the NICE guidelines (National Institute for Health and Care Excellence, 2006). The original intervention was designed to tackle behavior problems in typically developing children and has shown strong evidence on improving conduct problems (Leijten et al., 2018; Menting et al., 2013), ADHD symptoms and parenting skills (Leijten et al., 2018).

Regarding ASD and neurodevelopmental delays, a number of parent group interventions have been developed, such as The Incredible Years Autism Spectrum and Language Delays (IY-ASLD®) (Webster-Stratton et al., 2018), Stepping Stones (Ruane & Carr, 2019), EarlyBird (Palmer et al., 2020), or the Hanen program More than words, focused on social communication (Weitzman, 2013). To our knowledge, none of these interventions are regularly offered to parents in the Spanish Public Health System.

The Incredible Years Autism Spectrum and Language Delays (IY-ASLD®) program has been developed to address the needs of parents of young children on the autism spectrum or with language delays (Webster-Stratton et al., 2018). The intervention is not as focused on disruptive behavior as IY-BASIC, and it covers a wide range of areas: language, social skills, emotion regulation, symbolic play, behavior management, etc. Compared to the basic program, the adaptation increases the focus on useful strategies in neurodevelopment disorders such as prompting, visual support or sensory interests, it emphasizes the importance of self-care and social support, and it includes smaller groups (6-8 parents plus partners). Initial evidence on the feasibility of implementing this intervention in the UK National Health Service (Williams et al., 2020) and in the US (Dababnah et al., 2019) has been reported. The IY-ASLD® program has never been piloted in Spain, where the Public Health System lacks early, brief, intensive and evidence-based interventions for young children with neurodevelopmental problems (Lasa Zulueta et al., 2014).

The coronavirus disease (COVID-19) pandemic has been particularly detrimental to children with neurodevelopmental disorders (NDD) and their families, affected by the routine disruption and the restrictive measures implemented worldwide (Aishworiya & Kang, 2021; Lee, 2020; Shorey et al., 2021). This situation motivated clinicians to explore the implementation of telehealth resources for individuals with NDD, particularly for children with ASD (Conti et al., 2020; McDevitt, 2021; Wagner et al., 2021). A number of interventions were adapted to the online format, including diagnostic assessments and therapies (degli Espinosa et al., 2020; Ellison et al., 2021; Hao et al., 2021; McIntyre et al., 2022; Narzisi, 2020). However, most telehealth resources targeted children with ASD and their families, and there was a scarcity of interventions for children with other neurodevelopmental delays (Law et al., 2021; Shorey et al., 2021).

The main aim of the present study was to examine the feasibility of implementing the IY-ASLD® program in its online format within the Spanish Public Mental Health System. Parents of children with neurodevelopmental problems should have access to evidence-based interventions, but unfortunately this is not the case in the Spanish Public Health System. As recommended by Michelson et al. (2013), analyzing the feasibility of a new intervention in a specific context is fundamental before testing its effectiveness. Although several feasibility studies have been conducted with the IY-ASLD® program, none of them took place in Spain (Dababnah et al., 2019; Hutchings et al., 2016; Williams et al., 2020). The Spanish system is different from those of the US or the UK, and therefore a feasibility study is needed in our context.

Research hypotheses were as follows:

I. Parents accept to participate in the program, allowing for randomization and for the implementation of the intervention at each site.

II. Parents' compliance with the program is acceptable (parents attend at least 60% of the sessions and a minimum of 50% of parents finish the intervention, as established in the parent group leader certification process of IY-ALSD) (The incredible Years, 2019).

III. The program can be reliably implemented in the Spanish Public Health System, obtaining a high level of fidelity to the intervention (>80% of intervention items carried out).

IV. Parents report good levels of satisfaction with the program and its online format.

This study was part of a larger project including a pilot RCT to examine the preliminary efficacy of IY-ASLD®. Further analyses will be performed in a subsequent study.

METHOD

Study design and participants

This multicenter, pragmatic, randomized, controlled pilot trial was conducted in child and adolescent mental health services from three hospitals in Spain: *[Hospital 1, name omitted for peer-review]*, *[Hospital 2, name omitted for peer-review]*, and *[Hospital 3, name omitted for peer-review]*.

Different inclusion criteria were defined for each site, as the study was conducted in specialist ASD units in the *[Hospital 1]* and *[Hospital 2]* sites, and in a specialized unit for preterm children at risk of developmental disorders in the *[Hospital 3]* site. Inclusion criteria were as follows:

1) (a) *[Hospital 1]* and *[Hospital 2]* sites: parents/caregivers of children diagnosed with ASD (clinical diagnosis performed by psychiatrists or clinical psychologists in the service, based on DSM-5 diagnostic criteria), (b) *[Hospital 3]* site: parents/caregivers of preterm children (< 37 weeks of gestational age) with ASD or with communication and/or socialization difficulties (defined as Vineland-III scores below 1SD in any of the communication or socialization subdomains). Both criteria were not mutually exclusive (i.e. preterm birth was not an exclusion criterion in the *[Hospital 1]* and *[Hospital 2]* sites, and having a clinical diagnosis of ASD was not an exclusion criterion in the *[Hospital 3]* site).

2) Parents of children aged 2–5 years, as recommended by the intervention developers (Webster-Stratton et al., 2018).

3) Parents/caregivers showing good understanding of the Spanish language.

4) Parents/caregivers consenting to take part in the study and signing the informed consent.

Exclusion criteria were: 1) Attending another structured parenting program (focused on improving parental strategies to improve children development or regulation difficulties) during the intervention phase of the study; and 2) Children in the care of their local authority.

Procedure

Clinicians from the three sites referred potentially eligible families. A member of the research team phoned the families and offered further information about the study and the intervention, providing parents the opportunity to ask any questions. Families willing to take part in the study were offered an appointment to sign the informed consent and carry out the baseline assessment at each site. Participants were able to discontinue the treatment sessions or drop out from the control group at any point at their request, with no effects on their usual health care.

Ethical approval was granted by the ethical committees of each site (*[Hospital 1]*, *[Hospital 2]* and *[Hospital 3]* (*ethical approval number omitted for peer-review*). All participating parents provided written informed consent.

After informed consent was obtained and baseline measures were collected, families were randomly allocated to either the intervention (IY-ASLD®) or treatment-as-usual (TAU) control condition in a 1:1 ratio. In one of the sites (*[Hospital 3])*, randomization was performed in a 2:1 ratio with twice as many patients randomized to the intervention group, due to a lower recruitment rate. Randomization was conducted within each site. Allocation was stratified by developmental level, establishing two levels below and above the cutoff IQ = 70 (assessed with the cognitive subscale of the DP-3). Participants were informed of their allocation by phone.

The protocol for this study was registered in ClinicalTrials.gov (ID number: *[omitted for peer review]*. Unique Protocol ID: *[omitted for peer review]*. Further details can be found in the published protocol (*reference omitted for peer review*).

Intervention

The IY-ASLD® parent program (Webster-Stratton et al., 2018) is a face-to-face group-based intervention of 14-16 sessions for parents of children presenting neurodevelopmental difficulties. The program promotes positive parent-child relationships to build a wide range of

developmental outcomes including language, emotional, social and adaptive skills. Communication and social engagement are fostered through child-directed play, and limits are set through positive discipline. The following topics are covered in the intervention: (a) child-directed narrative play; (b) pre-academic and persistence coaching; (c) social coaching; (d) emotion coaching; (e) developing imagination through pretend play; (f) children's self-regulation skills; (g) using praise and rewards; and (h) effective limit-setting and behavior management. One of the main principles of the intervention is the collaborative approach, promoting parents' discussion around the topics of interest and facilitating a solution-based perspective. The intervention includes group discussions, brainstorming activities and video modeling, and emphasizes the importance of practice-based learning through role-playing. The program takes into consideration the different developmental levels of each child. Weekly home tasks were assigned to parents, and families were phoned each week to encourage home-based practice as part of the program delivery.

Due to the COVID-19 pandemic, the intervention has been adapted to an online format. The IY-ASLD® developers recommend to set an increased number of shorter sessions when delivered online (e.g., 22 sessions approximately, of one hour and a half each), as well as to reduce the number of parents per group (The Incredible Years, 2020). Other adaptations were as follows: the handouts were sent to the families before the start of the intervention, the video vignettes were shown on the shared screen, brainstorming activities were collaboratively performed using the dashboard and the shared screen, participants were sent to separate rooms for discussions and practice, parents were praised verbally, with stickers or through the chat. Parents were asked to have specific materials with them (e.g. toys, books) to conduct the role plays in the main room or in small rooms.

Group leaders were experienced clinicians (child and adolescent psychiatrists and clinical psychologists) and attended the 3-day official IY-ASLD® training. During the intervention, they received a supervision session to enhance fidelity. As the intervention was conducted online, group leaders were supervised by the developer of the program, Carolyn Webster-Stratton, to adapt the intervention from face-to-face to the online format.

The intervention was planned to be delivered between March 2020 and July 2020 at each site. However, due to the outbreak of the COVID-19 pandemic, strict lockdown measures were enforced in Spain starting on 14 March 2020. Consequently, the start of the intervention was postponed to September 2020 and the intervention lasted until March 2021. Families were contacted again after the lockdown and, as several months had passed since the baseline assessment, nine families were no longer interested in participating in the study.

Due to the unstable epidemiological situation regarding the COVID-19 pandemic, the intervention was entirely performed online in *[Hospital 2]* and *[Hospital 3]*. The group at the *[Hospital 1]* started face-to-face and changed to the online version when the epidemiological situation worsened in Malaga (six face-to-face and twelve online sessions).

A total of four intervention groups were conducted: one in *[Hospital 1]*, one in *[Hospital 3]*, and two in *[Hospital 2]*.

Control condition families received TAU, meaning they continued to access any services with which they were already involved. In the Spanish Public Health System, TAU typically involves follow-up appointments with a child and adolescent psychiatrist or a clinical psychologist. Emotional support, unstructured guidance and medication adjustment, when needed, are usually offered.

Parents from TAU and intervention groups completed baseline and follow-up measures in the same time frame. The follow-up assessment was conducted online due to the pandemic situation. Upon completion, the TAU group received a written summary of the therapy contents.

Measures

Baseline and sample descriptors

Demographic and clinical variables were collected at baseline. These included child's sex, age, gestational weeks at birth, living situation of the family, educational status (type of schooling), neurodevelopmental problems in siblings, previous parenting interventions, and socioeconomic status. The latter was determined using the Hollingdale's Index of Social Position (Hollingshead, 1957). Specific data on race/ethnicity were not recorded.

Due to the pragmatic nature of the study, the Autism Diagnostic Observation Schedule-2 (ADOS-2) tool had been administered as part of the children's usual diagnostic assessment as per clinical judgement.

The following questionnaires were administered at baseline to assess the clinical characteristics of children and parents:

- Modified Checklist for Autism in Toddlers-Revised with Follow-up (M-CHAT-R/F; Robins et al., 2014): this parent-reported 20-item questionnaire screens ASD symptoms in children aged 24-30 months. It was administered to describe children's social communication difficulties. The Spanish translation of M-CHAT-R/F has shown valid and reliable results (Canal-Bedia et al., 2011). Children were considered to be at high risk of ASD when their scores were 8 or higher, and medium risk when their scores were between 3 and 7, according to the questionnaire scoring guidelines.

- Social Communication Questionnaire (SCQ; Rutter et al., 2003): it is a 40-item parent report measure with a yes/no format, based on the Autism Diagnostic Interview-Revised (ADI-R) (Le Couteur et al., 2003). The Lifetime version of this questionnaire was administered with the same aim as the M-CHAT-R, in children aged between 30 months and 5 years (Marvin et al., 2017). The Spanish version of the questionnaire has shown good psychometric properties (Rutter et al., 2019). Children were considered to be at risk of ASD when their scores were 11 or higher, following previous research suggestions (Barnard et al., 2016; Moody et al., 2017; Rosenberg et al., 2018).

- Developmental Profile-3 (DP-3; Alpern, 2007): this 180-item parental questionnaire assesses developmental delays in different domains: motor, adaptive, socio-emotional, cognitive, and communication. It also generates an overall general development score, with lower scores reflecting potential difficulties in child development. The Spanish version has shown good internal consistency (Alpern, 2018). The standard score ranges were used in this study: <70 = delayed; 70-84 = below average; 85-115 = average; 116-130 = above average; >130 = well above average.

- Vineland Adaptive Behavior Scale-3 (VABS-3, parent/caregiver report form; Paul et al., 2004): the VABS-3 is a standardized assessment tool that explores adaptive functioning in different areas (communication, socialization, daily living skills and motor skills). It also generates a final adaptive composite score. It has shown excellent test-retest reliability and is considered a very efficient tool to measure the adaptive behavior profile of preschool children with developmental problems (Balboni et al., 2001). For each area or domain, scores greater than or equal to 86 are considered adequate or above adequate. Domain scores between 71 and 85 are considered moderately low, and scores of 70 and below are considered low and indicate the person has a significant skill deficit when compared with similarly aged peers.

Feasibility outcomes

Feasibility was operationalized in terms of recruitment and retention rates, engagement and compliance with the intervention (i.e., session attendance and program completion), fidelity to the manual, and parental satisfaction with the intervention and with its online format.

Participants' retention and parents' engagement with the program were monitored throughout the intervention. Participants were considered to complete the program if they had attended 15 or more sessions out of 22 in *[Hospital 2]* and *[Hospital 3]*, and 11 or more sessions out of 18 in *[Hospital 1]* (i.e., they had attended more than 60% of the sessions). Fidelity to the manual was pursued by the completion of the official IY-ASLD® training by all group leaders and co-leaders, and supervision with the program developer. Fidelity was measured throughout the intervention

using an official program-specific facilitator checklist that each group leader completed after each session.

Parents in the intervention condition completed the following questionnaires:

- Autism Program Parent Weekly Evaluation (The Incredible Years, 2018): this instrument, which is part of the IY-ASLD® program materials, was administered after each session. It was used to collect information regarding compliance and satisfaction throughout the study.

- Autism Program Parent Final Satisfaction Questionnaire (APPFSQ; The Incredible Years, 2018): this questionnaire is also included within the IY-ASLD® program. It was used to measure the acceptability and satisfaction with the intervention after the last session. It covers five areas: (1) the overall program, (2) usefulness of teaching format, (3) usefulness of specific teaching strategies, (4) evaluation of the group facilitators, and (5) the parent group. There are also three open-ended questions about suggested improvements, the need for parenting support, and the main benefits of the program. Two questions were added to the original questionnaire to assess quantitatively and qualitatively the satisfaction with the online format. The first one was a Likert question: *"How would you rate the online format?".* Responses ranged from 1 (extremely unhelpful) to 7 (extremely helpful). An open-ended question regarding advantages and disadvantages of the online version was also included: *"What positive aspects and limitations do you find in the online format?".*

These measures were completed by parents and returned to the research assistant of the project, and group therapists did not have access to individual satisfaction feedback from parents. This was explained to parents from the beginning of the study to reduce the risk that parents felt obliged to provide positive responses.

As specified in the study protocol, the Child Behavior Checklist (CBCL 1.5-5; Pandolfi et al., 2009), the Parent Stress Inventory-Short Form (PSI-SF; Zaidman-Zait, 2010) and the Beck Depression Inventory-II (BDI-II; Beck et al., 1996) were also administered as outcome measures to assess the preliminary efficacy of the intervention, which will be further investigated elsewhere.

Sample size

We estimated 34 participants needed per arm of the study, therefore we aimed to recruit approximately 70 participants.

The IY parenting intervention is designed for groups of 10-12 parents maximum. For the IY-ASLD® version, a reduced number of 8-10 participants is recommended, as these parents tend to experience higher levels of stress and their children have more developmental and conduct problems than the general population. Also, program developers recommend considering smaller groups when delivering the program online. Therefore, we estimated to recruit between 6 and 8 participants for each intervention group.

Statistical analyses

The sample characteristics and feasibility outcomes are reported with summary statistics (frequencies, percentages, means and standard deviations).

Bivariate analyses were conducted to determine potential differences in baseline characteristics between the families that completed the study and those who were lost at follow-up. Considering the delay in the start of the intervention due to the COVID-19 pandemic (as explained in the Procedure section), we assessed potential differences between the final sample of the study and those who withdrew from the study after the lockdown. Within the intervention group, differences between those who completed the intervention and those who disengaged were also examined. These analyses were performed using chi-squared tests for categorical variables, and T-tests or Mann-Whitney tests for numerical variables, depending on whether the data met parametric assumptions. Continuous variables were tested for normality using the Shapiro-Walk test and visual methods (histograms and Q-Q plots).

In order to assess potential differences across the three sites, chi-squared tests were used for categorical variables, and one-way ANOVA or the Kruskal-Wallis test were conducted as appropriate for numerical variables.

Regarding program engagement, compliance and satisfaction outcomes, we analyzed whether there were significant differences between families of children with an ASD diagnosis and those without a diagnosis, by means of chi-squared tests for categorical variables, and T-tests or Mann-Whitney tests for numerical variables.

The qualitative responses were transcribed, and a thematic analysis was performed (Braun & Clarke, 2006). Two members of the team who were not involved in the intervention conducted an independent coding analysis for the open-ended questions. The transcripts were read multiple times to identify codes underlying the responses provided by the families. Codes were then grouped together into overarching themes. The two reviewers compared the findings and resolved any discrepancies with a third member of the team.

Data analyses were performed using SPSS Statistics 25 and Atlas.ti 23.

This study follows the CONSORT guidelines (see Supplementary File 1 for the CONSORT checklist).

RESULTS

Sample characteristics

Children were predominantly male (82.7%), mean age was 45.4 months, and most of them had a diagnosis of ASD (86.5%). Table 1 shows the sociodemographic characteristics of participants at baseline. Significant differences across the three sites were only found in the variables *preterm birth*

($\chi^2(2) = 25.051$, $p<.001$) (100% of the sample in *[Hospital 3]* were premature children) and *type of schooling* ($\chi^2(2) = 7.452$, $p = .024$): in *[Hospital 3]*, 30.8% did not go to any school and 69.2% attended mainstream school (starting at 2 or 3 years of age in Spain); in *[Hospital 2]*, 11.1% did not go to any school and 88.9% attended mainstream school; and in *[Hospital 1]*, 100% of the sample attended mainstream school.

Descriptive data on the baseline children clinical variables are reported in table 2. ADOS-2 was administered to 37 children as part of their clinical assessment (71.2%). M-CHAT-R/F and SCQ were administered to 29 and 22 children, respectively. Regarding the SCQ, 95.5% of children who were administered this questionnaire scored above the cutoff point, indicating a risk of ASD. With regards to M-CHAT-R/F scores, 37.9% of children were at medium risk of ASD, and 37.9% were at high risk. Considering the different inclusion criteria at each site, significant differences were found across the three sites in the following baseline clinical variables: *ASD diagnosis* ($\chi^2(2) = 24.267$, $p = .000$, in *[Hospital 3]* 46.2% of children had an ASD diagnosis, while the diagnostic rate was 100% in the other two sites); *VABS-3 total score* ($F(2,50) = 27,080$, $p < .001$) and *DP-3 General development index score* ($F(2,50) = 4,641$, $p = .014$), where scores were significantly higher in children from *[Hospital 3]* site compared to children from *[Hospital 1]* and *[Hospital 2]* sites.

[Tables 1 and 2]

Feasibility outcomes

Recruitment and retention

Figure 1 shows the participant flowchart. One hundred and fifty-four families were referred to the study from the three participating sites. Sixty-two families were recruited as they were eligible for participation and consented to take part in the study (40.3% of the families assessed for eligibility; 29.6% in *[Hospital 3]*, 31.9% in *[Hospital 2]*, and 77.4% in *[Hospital 1]*), and were randomized into intervention or TAU group. Of these 62 family units, two had twins that both met inclusion criteria for the study, and therefore a total of 64 children were included.

Participants' recruitment took place between January 2020 and March 2020, as the intervention was planned to start in March 2020. However, as explained above, strict lockdown measures were enforced in Spain in March 2020 due to the COVID-19 pandemic. Consequently, the intervention finally took place from September 2020 to March 2021.

When families were contacted again after the lockdown to start the intervention (September 2020), 11 family units indicated that they were no longer interested in participating in the study. Therefore, the final sample was 51 family units (28 receiving the intervention and 23 receiving TAU). One of these 51 families had twins, yielding a sample of 52 children. In 6 families, both the father and the mother agreed to participate, which led to a total of 57 parents included.

The 11 family units (12 children) that dropped out after the COVID-19 lockdown showed significant differences with the final sample of the study in the demographic variable *living situation* ($\chi^2(2)=6.781$, $p=.034$): children from the families who declined to participate after the lockdown were less likely to live permanently with one parent only (0% vs. 19.2%) and more likely to have a joint custody situation (8.3% vs. 0%). No other significant differences were found in any sociodemographic or clinical variables (e.g., ASD diagnosis) between families who dropped out from the study after COVID-19 lockdown and those who did not.

The follow-up assessment was conducted between March 2021 and May 2021. Retention at follow-up was 84.3% of families (100% in *[Hospital 3]*, 83.3% in *[Hospital 2]* and 76.2% in *[Hospital 1]*). No significant differences were found in retention rates among the three sites. The trial ended when the follow-up assessment was completed. No harms were reported.

No statistically significant differences were found in any sociodemographic or clinical variables between the families that completed the study and those who were lost at follow-up.

[Figure 1]

Program engagement and compliance

A total of 22 weekly sessions were conducted in *[Hospital 3]* and *[Hospital 2]*, and 18 weekly sessions were carried out in *[Hospital 1]*. Mean number of sessions attended was 16 (SD=6.39; 75.9% of attendance). In *[Hospital 3]*, parents attended a mean of 20 sessions (SD=1.8; 90.9% of attendance), at *[Hospital 2]* a mean of 17 sessions (SD=7.3; 77.3% of attendance), and at *[Hospital 1]* a mean of 12 sessions (SD=6.1; 66.7% of attendance). No significant differences were found among the three sites in participants' attendance rate (H (2,28) = 1.988; p = .370). No significant differences were found in attendance rates between families who had a child with an ASD diagnosis and those whose child did not have an ASD diagnosis (U = 34.50; z = -.894; p = .371).

Twenty-three family units (82.1%) completed the program. Specifically, the intervention was completed by 8 (100%), 8 (80%) and 7 (70%) families in *[Hospital 3]*, *[Hospital 2]* and *[Hospital 1]*, respectively. No significant differences were found in the percentage of families completing the intervention among the three sites ($\chi2$ (2) = 2.776, p = .250) or between families who had a child with an ASD diagnosis versus those who did not ($\chi2$ (1) = 1.014, p = .314).

No significant differences were found in any sociodemographic or baseline clinical variable between intervention completers and non-completers.

Fidelity

Regarding fidelity of program delivery, 93.4% of the program content was delivered on average (range: 89.9%-96.9%), and 86.7% of video vignettes were covered (range: 82.7%-90.7%).

Parental satisfaction with the intervention

Throughout the program, almost all components of the weekly parent evaluations were rated as helpful or very helpful. Content and videos, teaching/leadership, group discussion, practical exercises and homework exercises were rated as helpful or very helpful in 99.8%, 100%, 98.9%, 96.1% and 99.3% of the evaluations, respectively. No significant differences were found among the three sites in participants' mean ratings (content and videos: H (2,29) = 0.083, p = .959; teaching/leader: H (2,29) = 0.116, p= .944; group discussion: H (2,29) = 1.849, p= .397; practical exercises: H (2,29) = 0.653, p= .721; homework: H (2,19) = 0.944, p= .624). Similarly, no significant differences were found in mean weekly satisfaction ratings between families whose child had an ASD diagnosis and those who did not (content and videos: U = 26.50; z = -1.378; p = .168; teaching/leader: U = 39.0; z = -.525; p = .600; group discussion: U = 35.0; z = -.778; p = .437; practical exercises: U = 31.0; z = -1.038; p = .299; homework: U = 24.0; z = -.447; p = .655).

A total of 23 parents (22 families) filled out the APPFSQ. Of these, 78.3% rated the overall program highly (score of 6 or 7 out of 7), 100% rated the teaching format as "*extremely helpful*" or "*very helpful*", 91.3% rated the specific techniques as "*extremely helpful*" or "*very helpful*", 95.7% were very satisfied with the group leaders (score of 6 or 7), and 95.7% were very satisfied regarding the relationship with other parents of the group (score of 6 or 7).

The mean rating of all components was above six out of seven (see Table 3). No significant differences were found across the three sites in any of the satisfaction components (overall program: H (2,23) = 2.621; p = .270; teaching format: H (2,23) = 1.009; p = .604; techniques: H (2,23) = 1.388; p = .499; leaders: H (2,23) = 0.551; p = .759; parent group: H (2,23) = 0.452; p = .798). No significant differences were found in satisfaction ratings between families whose child had an ASD diagnosis and those who did not (overall program: U = 16.50; z = -1.67; p = .095; teaching format: U = 35.0; z = -.086; p = .932; techniques: U = 26.0; z = -.861; p = .389; leaders: U = 26.50; z = -.887; p = .375; parent group U = 36.0; z = .00; p = 1.0). The ratings of each item of the APPFSQ can be found in Supplementary File 2.

[Table 3]

Regarding the open-ended questions of the APPFSQ, several themes were identified for each question. In relation to the benefits of the program, most parents expressed feeling grateful because the program allowed them to *share their experiences with other families* living a similar situation, and they could feel the support from the group. Other parents mentioned that they *learnt new things*, both from a practical (e.g., specific tools or techniques) and theoretical (e.g., information about ASD) perspective. Some parents noted that, after the program, they *felt more confident about themselves* when interacting with their children and felt they had gained emotional stability. *Understanding their children better* (e.g., children's behaviors and emotions) after the program was also mentioned as a benefit, as well as *being able to help their children in a better way* after the intervention. Finally, a participant reported that the program had helped her understand that her *role should be a mother's role* and not a therapist's role.

With regards to the limitations of the program, the main areas for improvement that were mentioned were the *online format* (42.9% of the analyzed answers expressed that they would have preferred an in-person intervention) and the *program length* (some parents would have preferred to have more sessions). Also, it was suggested that *children could be involved* in the program, either by bringing them to some sessions, or by recording some parent-child interactions so therapists could provide feedback. A parent commented that an *individual session could be added* at the end of the program, another one indicated that a *less behavior-focused approach* could be helpful to some extent, and another one (whose child was 6 years old at the end of the intervention) mentioned that the *age range could be widened*. Many participants reported that they were *very satisfied overall* with the intervention and they could not think of areas for improvement.

Parents also explained different aspects related to the need for parenting assistance. Overall, all participants indicated that *parents' support is needed and important*. In relation to that, some expressed that *parents need to be offered help first, so they can be able to help their children*. Others mentioned that they *need to have specific resources* (tools, guidelines, information) to be able to understand, help and guide their children. It was also mentioned that it is *important for parents to have a space where they can share their experiences with other families* who are facing similar challenges. Finally, some parents reported frequently having *negative feelings associated with parenthood* (e.g., feeling lonely, overwhelmed, or uncertain). A table with all themes and their associated quotes can be found in Supplementary File 3.

Parental satisfaction with the online format

91.3% of the parents rated the online format as *"extremely helpful"* or *"very helpful",* and 8.7% as *"somewhat helpful"*. There were not significant differences among the three sites (H (2,23) = 2.428; p = .297) or between families with and without an ASD diagnosis (U = 19.50; z = -.752; p = .452) regarding satisfaction with the online format.

In terms of the qualitative responses to the question *"How would you rate the online format?"*, most parents provided an *overall positive feedback.* Regarding specific positive aspects of the online format, the thematic analysis yielded the following main themes: *Improvement of attendance and access to therapy*, *Family logistics*, *Acceptability and safety of the intervention considering the COVID-19 pandemic*, and *Positive relationship developed between participants*. In terms of the disadvantages, some parents reported that they *would have preferred an in-person intervention.* Other parents mentioned as drawbacks the *distant interpersonal relationships* established with some parents of the group, the *limitations delivering therapy contents* on some occasions (e.g., doing role play exercises)*,* and the difficulties in *getting used to the online format*. A table with all themes and their associated quotes can be found in Supplementary File 3.

DISCUSSION

This pilot described the feasibility of implementing the IY-ASLD® intervention within three sites in Spain. It was conducted during the COVID-19 pandemic and the intervention was mostly delivered online. Forty percent of families assessed for eligibility were recruited, and participants showed high attendance and satisfaction levels, with 82% of the families completing the intervention and 78% rating the overall program highly. Fidelity of delivery was high (93% of the program content was delivered). These findings indicate that the IY-ASLD® program is feasible within the public mental health system and acceptable for parents of children with ASD, communication, or socialization difficulties. This is important from an equity perspective, as families of children with neurodevelopmental problems often have to seek private treatment in Spain due to the limited assistance offered in the public mental health system.

Recruitment for the pilot was lower than intended with 62 of the planned 70 families recruited. This was due to a lower recruitment rate in one of the sites where only preterm children were included (n=16 *[Hospital 3]*, n=22 *[Hospital 2]*, n=24 *[Hospital 1]*). It is of note that preterm children are a more hard-to-ascertain group of patients, and despite their heightened risk of developing ASD symptoms, this intervention has never been piloted with this group before. In order to maximize the number of parents receiving the intervention, randomization in the *[Hospital 3]* site was done on a 2:1 ratio (intervention:control). Notwithstanding this, retention at the post-intervention follow-up assessment was high (81%), with no significant differences across sites, and comparable to similar studies (Dababnah et al., 2019; Williams et al., 2020).

The COVID-19 pandemic lockdown started in Spain just after randomization and the intervention had to be postponed for 6 months. Nine families withdrew from the study during this period. These families only differed from the ones who kept participating in the study in their living situation. The fact that those who declined to participate after the lockdown were more likely to have a joint custody situation could be related to the literature findings suggesting that divorced and separated couples with children faced several challenges during the COVID-19

pandemic (Goldberg et al., 2021). These challenges might have made it difficult for these families to engage in the program. However, this interpretation should be considered with caution due to other potentially related factors and the small sample sizes.

Despite delivering the intervention in an online format and during the pandemic, the proportion of participants completing the intervention was high (82%) and comparable to other studies of the IY-ASLD® program delivered face-to-face (Williams et al., 2020, Dababnah et al., 2019). Despite two of the sites delivered the full intervention online and one site delivered 2/3 of the sessions online, no significant differences on completion rates were found across sites.

Parental satisfaction with the overall intervention, all its components, and with group leaders was rated highly, when measured quantitatively and qualitatively. Parents reported that the program had been helpful for them, not only for learning new tools and strategies, but also for feeling supported and self-confident, among other aspects. These high levels of satisfaction are consistent with previous studies implementing the IY-ASLD® intervention face-to-face (Dababnah et al., 2019; Hutchings et al., 2016; Williams et al., 2020). Parents' feedback regarding the online format was overall positive, which aligns with previous literature that has reported benefits of telehealth interventions for children with ASD and their families, particularly when the intervention is delivered by a therapist (Ellison et al., 2021; Pickard et al., 2016). A recent systematic review showed that the online format is similar to in-person interventions, in terms of effectiveness and parental satisfaction (Leijten et al., 2024). Most parents stressed that the online format allowed them to attend the sessions more regularly, facilitating family and work logistics. Parents' reports reflected how difficult it can be for families with young children to balance work and family life with regular attendance to intensive early interventions. This is a significant factor, as parent-mediated interventions are the first-line treatment options for young children with neurodevelopmental difficulties (National Institute for Health and Care Excellence, 2013). However, some wrote that they would have preferred to attend the therapy face-to-face. In this regard, a considerable number of parents highlighted the lack of personal warmth and the interpersonal distance as the main disadvantage of the online format. This is a significant point to consider, as creating a warm and secure environment is a hallmark of group interventions in mental health, especially for families of children with neurodevelopmental problems (Webster-Stratton et al., 2018). This, and other secondary downsides of the online format, might be addressed with mixed modalities. Combined in-person and online interventions would allow ease of access to intensive therapy while preserving close human contact and relationships. Moderate effect sizes of online parenting programs have been found in a network meta-analysis (Canário et al., 2024), but no previous data on implementing IY-ASLD® intervention in its online format are available so far.

An important ethical consideration regarding tele-health is that families from socially deprived areas might have limited access to technology. Previous studies have demonstrated that lower socio-economic status is associated with lower access to telemedicine services (Alam, 2019; Reed et al., 2020). Thus, implementing online interventions could be detrimental to certain families. In our study, most participants came from middle to high socioeconomic backgrounds (78.5%). Future studies could analyze whether SES might have a direct impact on access and acceptability of online interventions for families of children with NDD.

This study is one of the few that focuses on how to support parents of, not only children with an ASD diagnosis, but also those with subthreshold symptoms and developmental delays. We found no differences in any outcome variable (e.g., program engagement, compliance, satisfaction) between families of children meeting ASD diagnostic criteria and those who did not. This is of paramount importance, as it indicates that this intervention is acceptable and satisfying not only for parents of children with ASD but also for those with broader neurodevelopmental difficulties. In fact, the program is already designed for children with ASD and those with language disorders, and both conditions are known to have high rates of co-occurring developmental conditions (e.g., ADHD) (Arpi & Ferrari, 2013; Micai et al., 2023). Therefore, a dimensional approach to NDD could be useful when delivering parenting interventions, which strongly relates to the increasing awareness in providing transdiagnostic interventions (Chu et al., 2014; Qanbari et al., 2022).

Regarding fidelity of delivery, group leaders reported delivering 93.4% of the program content, and they attended training and supervision sessions, indicating a high level of implementation fidelity. The pragmatic nature of the trial limited the implementation of further fidelity or supervision strategies. These results suggest that delivering the IY-ASLD® intervention in the Spanish Public Health System by existing staff is acceptable and feasible.

The findings need to be interpreted in light of strengths and limitations. To our knowledge, this is the first time that the IY-ASLD® program has been implemented in Spanish public mental health services, with relevant implications for clinical practice and patient equality. Another main strength lies in the fact that our sample included not only children meeting diagnostic criteria for ASD but also those with subthreshold symptoms and developmental delays. Children with developmental problems not meeting ASD criteria are often left out from specific resources and funded interventions. Also, the trial was conducted in specialist children's services with existing staff, therefore the results might be generalizable to other mental health services in Spain. However, this study has some limitations. First, the study did not include a comparison with a face-to-face modality and the sample size was limited, not allowing for robust conclusions. In this sense, it is known that the COVID-19 pandemic disrupted clinical trials worldwide (van Dorn, 2020), and in our study this led to having to adapt to the online format in a short period of time, and possibly to some participants dropping out of the study. Future studies could perform a RCT comparing in-person and online formats. Second, group leaders received limited supervision considering the change to a new format. However, they were highly experienced clinicians (psychiatrists and clinical psychologists) in the field of ASD and NDD. Third, parental satisfaction with the online format was assessed during the pandemic. Further research is needed to disentangle whether parents prefer online versus face-to-face formats, also beyond the pandemic. The 6-month delay to start the intervention due to the COVID-19 pandemic is another limitation, given that this amount time is developmentally significant for toddlers and preschoolers. Finally, individuals with neurodevelopmental disturbances and their families were not involved in the development of the study: future studies should include them from the first stages of the research process.

Implications

Our results suggest that the IY-ASLD® program is a well-accepted and satisfactory early intervention for parents of children with ASD or other neurodevelopmental problems, and it is feasible to implement it within the Spanish public mental health system. Even though the effectiveness of the intervention still needs to be assessed, this treatment could represent a first step to inform clinicians and policy makers regarding new evidence-based interventions in early childhood neurodevelopment.

ACKNOWLEDGEMENTS

We thank Alicia Koplowitz Foundation for their financial support. Alicia Koplowitz Foundation was not involved in the study design, data collection and analysis, writing of the report or the decision to submit the article for publication.

CONFLICT OF INTEREST

None.

REFERENCES

Agrawal, S., Rao, S. C., Bulsara, M. K., & Patole, S. K. (2018). Prevalence of Autism Spectrum Disorder in Preterm Infants: A Meta-analysis. *Pediatrics*, *142*(3), e20180134. https://doi.org/10.1542/peds.2018-0134

Aishworiya, R., & Kang, Y. Q. (2021). Including Children with Developmental Disabilities in the Equation During this COVID-19 Pandemic. *Journal of Autism and Developmental Disorders*, *51*(6), 2155–2158. https://doi.org/10.1007/s10803-020-04670-6

Alam, K. (2019). Determinants of access to eHealth services in regional Australia. *International Journal of Medical Informatics, 131*, 103960. https://doi.org/10.1016/j.ijmedinf.2019.103960

Alpern, G. D. (2007). *Developmental profile 3 (DP-3)* Los Angeles: Western Psychological Services.

Alpern, G. D. (2018). *DP-3. Perfil de Desarrollo-3* (F. Sánchez-Sánchez, Spanish adaptation). Madrid: TEA Ediciones.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders DSM-5* (5th ed.). American Psychiatric Association.

Arpi, E., & Ferrari, F. (2013). Preterm birth and behaviour problems in infants and preschool-age children: a review of the recent literature. *Developmental Medicine & Child Neurology*, *55*(9), 788-796. https://doi.org/10.1111/dmcn.12142

Astle, D. E., Holmes, J., Kievit, R., & Gathercole, S. E. (2022). Annual Research Review: The transdiagnostic revolution in neurodevelopmental disorders. *Journal of Child Psychology and Psychiatry*, *63*(4), 397-417. https://doi.org/10.1111/jcpp.13481

Balboni, G., Pedrabissi, L., Molteni, M., & Villa, S. (2001). Discriminant validity of the Vineland Scales: score profiles of individuals with mental retardation and a specific disorder. *American Journal of Mental Retardation: AJMR*, *106*(2), 162–172. https://doi.org/10.1352/0895-8017(2001)106<0162:DVOTVS>2.0.CO;2

Barnard-Brak, L., Brewer, A., Chesnut, S., Richman, D., & Schaeffer, A. M. (2016). The sensitivity and specificity of the social communication questionnaire for autism spectrum with respect to age. *Autism Research: Official Journal of the International Society for Autism Research, 9*(8), 838–845. https://doi.org/10.1002/aur.1584

Beck, A. T., Steer, R. A., & Brown, G. K. (1996) *BDI-II manual.* 2nd edition. San Antonio, TX: Harcourt Brace & Company.

Benson, P. R., & Karlof, K. L. (2009). Anger, stress proliferation, and depressed mood among parents of children with ASD: A longitudinal replication. *Journal of Autism and Developmental Disorders*, *39*(2), 350–362. https://doi.org/10.1007/s10803-008-0632-0

Bonis S. (2016). Stress and Parents of Children with Autism: A Review of Literature. *Issues in Mental Health Nursing*, *37*(3), 153–163. https://doi.org/10.3109/01612840.2015.1116030

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Canal-Bedia, R., García-Primo, P., Martín-Cilleros, M. V., Santos-Borbujo, J., Guisuraga-Fernández, Z., Herráez-García, L., Herráez-García, M.delM., Boada-Muñoz, L., Fuentes-Biggi, J., & Posada-de la Paz, M. (2011). Modified checklist for autism in toddlers: Cross-cultural adaptation and validation in Spain. *Journal of Autism and Developmental Disorders*, *41*(10), 1342–1351. https://doi.org/10.1007/s10803-010-1163-z

Canário, A. C., Pinto, R., Silva-Martins, M., Rienks, K., Akik, B. K., Stanke, K. M., ... & Leijten, P. (2024). Online parenting programs for children's behavioral and emotional problems: a network meta-analysis. *Prevention Science*, 1-18. https://doi.org/10.1007/s11121-024-01735-1

Chen, Y., Cheng, T., & Lv, F. (2022). Sense of Parenting Efficacy, Perceived Family Interactions, and Parenting Stress Among Mothers of Children With Autistic Spectrum Disorders. *Frontiers in psychology*, *13*, 878158. https://doi.org/10.3389/fpsyg.2022.878158

Chu, B C., Temkin, A. B., & Toffey, K. (2014). Transdiagnostic Mechanisms and Treatment for Children and Adolescents: An Emerging Field. In: *Oxford Handbook Topics in Psychology*. Oxford Academic, 3. https://doi.org/10.1093/oxfordhb/9780199935291.013.10,

Cogley, C., O'Reilly, H., Bramham, J., & Downes, M. (2021). A Systematic Review of the Risk Factors for Autism Spectrum Disorder in Children Born Preterm. *Child Psychiatry and Human Development*, *52*(5), 841–855. https://doi.org/10.1007/s10578-020-01071-9

Conti, E., Chericoni, N., Costanzo, V., Lasala, R., Mancini, A., Prosperi, M., Tancredi, R., Muratori, F., Calderoni, S., & Apicella, F. (2020). Moving Toward Telehealth Surveillance Services for Toddlers at Risk for Autism During the COVID-19 Pandemic. *Frontiers in Psychiatry*, *11*, 565999. https://doi.org/10.3389/fpsyt.2020.565999

Crump, C., Sundquist, J., & Sundquist, K. (2021). Preterm or Early Term Birth and Risk of Autism. *Pediatrics*, *148*(3), e2020032300. https://doi.org/10.1542/peds.2020-032300

Dababnah, S., Olson, E. M., & Nichols, H. M. (2019). Feasibility of The Incredible Years Parent Program for Preschool Children on the Autism Spectrum in two U.S. sites. *Research in Autism Spectrum Disorders, 57*, 120-131. https://doi.org/10.1016/j.rasd.2018.10.010

Daniolou, S., Pandis, N., & Znoj, H. (2022). The Efficacy of Early Interventions for Children with Autism Spectrum Disorders: A Systematic Review and Meta-Analysis. *Journal of clinical medicine*, *11*(17), 5100. https://doi.org/10.3390/jcm11175100

Degli Espinosa, F., Metko, A., Raimondi, M., Impenna, M., & Scognamiglio, E. (2020). A Model of Support for Families of Children With Autism Living in the COVID-19 Lockdown: Lessons From Italy. *Behavior Analysis in Practice*, *13*(3), 550–558. https://doi.org/10.1007/s40617-020-00438-7

Ellison, K. S., Guidry, J., Picou, P., Adenuga, P., & Davis, T. E., 3rd (2021). Telehealth and Autism Prior to and in the Age of COVID-19: A Systematic and Critical Review of the Last Decade. *Clinical Child and Family Psychology Review*, *24*(3), 599–630. https://doi.org/10.1007/s10567-021-00358-0

Estes, A., Munson, J., Dawson, G., Koehler, E., Zhou, X. H., & Abbott, R. (2009). Parenting stress and psychological functioning among mothers of preschool children with autism and developmental delay. *Autism: The International Journal of Research and Practice, 13*(4), 375–387. https://doi.org/10.1177/1362361309105658

Finlay-Jones, A., Varcin, K., Leonard, H., Bosco, A., Alvares, G., & Downs, J. (2019). Very early identification and intervention for infants at risk of neurodevelopmental disorders: A transdiagnostic approach. *Child Development Perspectives*, *13*(2), 97-103. https://doi.org/10.1111/cdep.12319

Fonseca Pedrero, E. (Coord.) (2021). *Manual de tratamientos psicológicos: infancia y adolescencia*. Pirámide [book in Spanish].

Fuentes-Biggi J, Ferrari-Arroyo MJ, Boada-Muñoz L, Touriño-Aguilera E, Artigas-Pallarés J et al (2006). Guía de buena práctica para el tratamiento de los trastornos del espectro autista. Grupo

de Estudio de los Trastornos del Espectro Autista del Instituto de Salud Carlos III [Article in Spanish]. *Rev Neurol* 43:425–438. https://doi.org/10.33588/rn.4307.2005750

Goldberg, A. E., Allen, K. R., & Smith, J. Z. (2021). Divorced and separated parents during the COVID-19 pandemic. *Family Process*, *60*(3), 866–887. https://doi.org/10.1111/famp.12693

Hao, Y., Franco, J. H., Sundarrajan, M., & Chen, Y. (2021). A Pilot Study Comparing Tele-therapy and In-Person Therapy: Perspectives from Parent-Mediated Intervention for Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, *51*(1), 129–143. https://doi.org/10.1007/s10803-020-04439-x

Harel-Gadassi, A., Friedlander, E., Yaari, M., Bar-Oz, B., Eventov-Friedman, S., Mankuta, D., & Yirmiya, N. (2018). Risk for ASD in Preterm Infants: A Three-Year Follow-Up Study. *Autism Research and Treatment*, *2018*, 8316212. https://doi.org/10.1155/2018/8316212

Hastings, R. P., Kovshoff, H., Ward, N. J., degli Espinosa, F., Brown, T., & Remington, B. (2005). Systems analysis of stress and positive perceptions in mothers and fathers of pre-school children with autism. *Journal of Autism and Developmental Disorders*, *35*(5), 635–644. https://doi.org/10.1007/s10803-005-0007-8

Herring, S., Gray, K., Taffe, J., Tonge, B., Sweeney, D., & Einfeld, S. (2006). Behaviour and emotional problems in toddlers with pervasive developmental disorders and developmental delay: associations with parental mental health and family functioning. *Journal of Intellectual Disability Research: JIDR*, *50*(Pt 12), 874–882. https://doi.org/10.1111/j.1365-2788.2006.00904.x

Hollingshead, A. (1957). *Two factor index of social position*. New Haven: Yale University.

Hutchings, J., Pearson-Blunt, R., Pasteur, M. A., Healy, H., & Williams, M. E. (2016). A pilot trial of the Incredible Years® Autism Spectrum and Language Delays Programme. *Good Autism Practice, 17*(1), 15–22. https://doi.org/10.1002/aur.2265

Kynø, N. M., Ravn, I. H., Lindemann, R., Smeby, N. A., Torgersen, A. M., & Gundersen, T. (2013). Parents of preterm-born children; sources of stress and worry and experiences with an early intervention programme - a qualitative study. *BMC Nursing*, *12*(1), 28. https://doi.org/10.1186/1472-6955-12-28

Lasa Zulueta, A., Jorquera Cuevas, C., Solana Azurmendi, B., & Del Arco Heras, S. (2014). *Evaluación de la calidad asistencial en el SNS de los trastornos mentales graves en la infancia. Estudio en Salud Mental Infanto-Juvenil*. Vitoria-Gasteiz: Ministerio de Sanidad, Servicios Sociales e Igualdad.

Law, J., Dornstauder, M., Charlton, J., & Gréaux, M. (2021). Tele-practice for children and young people with communication disabilities: Employing the COM-B model to review the intervention literature and inform guidance for practitioners. *International Journal of Language & Communication Disorders*, *56*(2), 415–434. https://doi.org/10.1111/1460-6984.12592

Le Couteur, A., Lord, C., & Rutter, M. (2003). *The autism diagnostic interview-revised (ADI-R), vol. 29*. Los Angeles: Western Psychological Services.

Lee J. (2020). Mental health effects of school closures during COVID-19. *The Lancet. Child & Adolescent Health*, *4*(6), 421. https://doi.org/10.1016/S2352-4642(20)30109-7

Leijten, P., Gardner, F., Landau, S., Harris, V., Mann, J., Hutchings, J., ... & Scott, S. (2018). Research review: Harnessing the power of individual participant data in a meta-analysis of the benefits and harms of the incredible years parenting program. *Journal of Child Psychology and Psychiatry*, *59*(2), 99-109. https://doi.org/10.1111/jcpp.12781

Leijten, P., Rienks, K., Groenman, A. P., Anand, M., Akik, B. K., David, O., ... & Canário, A. C. (2024). Online parenting support: Meta-analyses of non-inferiority and additional value to in-person support. *Children and Youth Services Review*, *159*, 107497. https://doi.org/10.1016/j.childyouth.2024.107497

Marvin, A. R., Marvin, D. J., Lipkin, P. H., & Law, J. K. (2017). Analysis of Social Communication Questionnaire (SCQ) Screening for Children Less Than Age 4. *Current Developmental Disorders Reports, 4*(4), 137–144. https://doi.org/10.1007/s40474-017-0122-1

McDevitt S. E. (2021). While quarantined: An online parent education and training model for families of children with autism in China. *Research in developmental disabilities*, *109*, 103851. https://doi.org/10.1016/j.ridd.2020.103851

McIntyre, L. L., Neece, C. L., Sanner, C. M., Rodriguez, G., & Safer-Lichtenstein, J. (2022). Telehealth delivery of a behavioral parent training program to Spanish-speaking Latinx parents of young children with developmental delay: Applying an implementation framework approach. *School Psychology Review, 51*(2), 206–220. https://doi.org/10.1080/2372966X.2021.1902749

Menting, A. T., de Castro, B. O., & Matthys, W. (2013). Effectiveness of the Incredible Years parent training to modify disruptive and prosocial child behavior: A meta-analytic review. *Clinical psychology review*, *33*(8), 901-913. https://doi.org/10.1016/j.cpr.2013.07.006

Micai, M., Fatta, L. M., Gila, L., Caruso, A., Salvitti, T., Fulceri, F., ... & Scattoni, M. L. (2023). Prevalence of co-occurring conditions in children and adults with autism spectrum disorder: A systematic review and meta-analysis. *Neuroscience & Biobehavioral Reviews*, *155*, 105436. https://doi.org/10.1016/j.neubiorev.2023.105436

Michelson, D., Davenport, C., Dretzke, J., Barlow, J., & Day, C. (2013). Do evidence-based interventions work when tested in the "real world?" A systematic review and meta-analysis of parent management training for the treatment of child disruptive behavior. Clinical Child and Family Psychology Review, 16, 18–34. https://dx.doi.org/10.1007/s10567-013-0128-0

Moody, E. J., Reyes, N., Ledbetter, C., Wiggins, L., DiGuiseppi, C., Alexander, A., Jackson, S., Lee, L. C., Levy, S. E., & Rosenberg, S. A. (2017). Screening for Autism with the SRS and SCQ: Variations across Demographic, Developmental and Behavioral Factors in Preschool Children. *Journal of Autism and Developmental Disorders, 47*(11), 3550–3561. https://doi.org/10.1007/s10803-017-3255-5

Narzisi A. (2020). Phase 2 and Later of COVID-19 Lockdown: Is it Possible to Perform Remote Diagnosis and Intervention for Autism Spectrum Disorder? An Online-Mediated Approach. *Journal of Clinical Medicine*, *9*(6), 1850. https://doi.org/10.3390/jcm9061850

National Institute for Health and Care Excellence. (2006). *Parent training/education programmes in the management of children with conduct disorders*. London: NICE.

National Institute for Health and Care Excellence. (2013). *Autism spectrum disorder in under 19s: support and management*. London: Department of Health.

Nicolaou, M., Rosewell, R., Marlow, N., & Glazebrook, C. (2009). Mothers' experiences of interacting with their premature infants. *Journal of Reproductive and Infant Psychology, 27*(2), 182–194. https://doi.org/10.1080/02646830801922796

Osborne, L. A., McHugh, L., Saunders, J., & Reed, P. (2008). Parenting stress reduces the effectiveness of early teaching interventions for autistic spectrum disorders. *Journal of Autism and developmental disorders*, *38*(6), 1092–1103. https://doi.org/10.1007/s10803-007-0497-7

Palmer, M., San José Cáceres, A., Tarver, J., Howlin, P., Slonims, V., Pellicano, E., & Charman, T. (2020). Feasibility study of the National Autistic Society EarlyBird parent support programme. *Autism*, *24*(1), 147-159. https://doi.org/10.1177/1362361319851422

Pandolfi, V., Magyar, C. I., & Dill, C. A. (2009). Confirmatory factor analysis of the child behavior checklist 1.5-5 in a sample of children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *39*(7), 986–995. https://doi.org/10.1007/s10803-009-0716-5

Paul, R., Miles, S., Cicchetti, D., Sparrow, S., Klin, A., Volkmar, F., Coflin, M., & Booker, S. (2004). Adaptive behavior in autism and Pervasive Developmental Disorder-Not Otherwise Specified: microanalysis of scores on the Vineland Adaptive Behavior Scales. *Journal of Autism*

and Developmental Disorders, *34*(2), 223–228. https://doi.org/10.1023/b:jadd.0000022612.18116.46

Pickard, K. E., Wainer, A. L., Bailey, K. M., & Ingersoll, B. R. (2016). A mixed-method evaluation of the feasibility and acceptability of a telehealth-based parent-mediated intervention for children with autism spectrum disorder. *Autism: The International Journal of Research and Practice*, *20*(7), 845–855. https://doi.org/10.1177/1362361315614496

Qanbari Alaee, E., Saed, O., Khakpoor, S., Ahmadi, R., Ali Mohammadi, M., Yoosefi Afrashteh, M., & Morovati, Z. (2022). The efficacy of transdiagnostic cognitive behavioural therapy on reducing negative affect, anxiety sensitivity and improving perceived control in children with emotional disorders - a randomized controlled trial. *Research in Psychotherapy (Milano)*, *25*(1), 588. https://doi.org/10.4081/ripppo.2022.588

Reed, M. E., Huang, J., Graetz, I., Lee, C., Muelly, E., Kennedy, C., & Kim, E. (2020). Patient characteristics associated with choosing a telemedicine visit vs office visit with the same primary care clinicians. *JAMA Network Open*, *3*(6), e205873. https://doi.org/10.1001/jamanetworkopen.2020.5873

Robins, D. L., Casagrande, K., Barton, M., Chen, C. M., Dumont-Mathieu, T., & Fein, D. (2014). Validation of the modified checklist for Autism in toddlers, revised with follow-up (M-CHAT-R/F). *Pediatrics*, *133*(1), 37–45. https://doi.org/10.1542/peds.2013-1813

Romero-González, M., Marín, E., Guzmán-Parra, J., Navas, P., Aguilar, J. M., Lara, J. P., & Barbancho, M. Á. (2021). Relación entre estrés y malestar psicológico de los padres y problemas emocionales y conductuales en niños preescolares con trastorno del espectro autista. *Anales de pediatría, 94*(2), 99-106. https://doi.org/10.1016/j.anpedi.2020.03.012

Rosenberg, S. A., Moody, E. J., Lee, L. C., DiGuiseppi, C., Windham, G. C., Wiggins, L. D., Schieve, L. A., Ledbetter, C. M., Levy, S. E., Blaskey, L., Young, L., Bernal, P., Rosenberg, C. R., & Fallin, M. D. (2018). Influence of family demographic factors on social communication questionnaire scores. *Autism Research: Official Journal of the International Society for Autism Research, 11*(5), 695–706. https://doi.org/10.1002/aur.1935

Ruane, A., & Carr, A. (2019). Systematic review and meta-analysis of Stepping Stones Triple P for parents of children with disabilities. *Family Process*, *58*(1), 232-246. https://doi.org/10.1111/famp.12352

Rutter, M., Bailey, A., & Lord, C. (2003). *Manual of the social communication questionnaire.* Los Angeles: Western Psychological Services.

Rutter, M., Bailey, A., & Lord, C. (2019). *SCQ. Cuestionario de Comunicación Social* (J. Pereña & P. Santamaría, Spanish adaptation). Madrid: TEA Ediciones.

Sandbank, M., Bottema-Beutel, K., Crowley LaPoint, S., Feldman, J. I., Barrett, D. J., Caldwell, N., Dunham, K., Crank, J., Albarran, S., & Woynaroski, T. (2023). Autism intervention meta-analysis of early childhood studies (Project AIM): updated systematic review and secondary analysis. *BMJ (Clinical research ed.)*, *383*, e076733. https://doi.org/10.1136/bmj-2023-076733

Shorey, S., Lau, L. S. T., Tan, J. X., Ng, E. D., & Aishworiya, R. (2021). Families With Children With Neurodevelopmental Disorders During COVID-19: A Scoping Review. *Journal of Pediatric Psychology*, *46*(5), 514–525. https://doi.org/10.1093/jpepsy/jsab029

Stanley, F., Blair, E., & Alberman, E. (2000). *Cerebral Palsies: Epidemiology and causal pathways.* London: Mac Keith Press.

The Incredible Years (2018). *The Incredible Years®: Resources for Group Leaders*. https://www.incredibleyears.com/resources/groupleaders

The Incredible Years (2019). *Tips for Preparing Your Video for Review Parent Programs*. https://www.incredibleyears.com/training/certification/documents

The Incredible Years (2020). *Hot Tips for IY Group Leaders Delivering the Incredible Years Video Parent Programs via On-Line Tele-Sessions*. https://www.incredibleyears.com/blog/2020/08/12/hot-tips-for-iy-group-leaders-delivering-parent-programs-online

Treyvaud, K., Anderson, V. A., Howard, K., Bear, M., Hunt, R. W., Doyle, L. W., Inder, T. E., Woodward, L., & Anderson, P. J. (2009). Parenting behavior is associated with the early neurobehavioral development of very preterm children. *Pediatrics*, *123*(2), 555–561. https://doi.org/10.1542/peds.2008-0477

Van Dorn, A. (2020). COVID-19 and readjusting clinical trials. *The Lancet, 396,* 523-524. https://doi.org/10.1016/S0140-6736(20)31787-6

Wagner, L., Weitlauf, A. S., Hine, J., Corona, L. L., Berman, A. F., Nicholson, A., Allen, W., Black, M., & Warren, Z. (2022). Transitioning to Telemedicine During COVID-19: Impact on Perceptions and Use of Telemedicine Procedures for the Diagnosis of Autism in Toddlers. *Journal of autism and developmental disorders*, *52*(5), 2247–2257. https://doi.org/10.1007/s10803-021-05112-7

Webster-Stratton, C. (2001). The Incredible Years: Parents, teachers, and children training series. *Residential Treatment for Children & Youth, 18*(3), 31-45. https://doi.org/10.1300/J007v18n03_04

Webster-Stratton, C., Dababnah, S., & Olson, E. (2018). The Incredible Years® group-based parenting program for young children with autism spectrum disorder. In: Siller, M., Morgan, L. (eds.) *Handbook of parent-implemented interventions for very young children with autism*, 261-282. Springer, Cham.

Weitzman, E. (2013). More than words—The Hanen Program for parents of children with autism spectrum disorder: A teaching model for parent-implemented language intervention. *Perspectives on Language Learning and Education*, *20*(3), 96-111. https://doi.org/10.1044/lle20.3.86

Williams, M. E., Hastings, R. P., & Hutchings, J. (2020). The Incredible Years Autism Spectrum and Language Delays Parent Program: A Pragmatic, Feasibility Randomized Controlled Trial. *Autism Research: Official Journal of the International Society for Autism Research*, *13*(6), 1011–1022. https://doi.org/10.1002/aur.2265

Woythaler M. (2019). Neurodevelopmental outcomes of the late preterm infant. *Seminars in Fetal & Neonatal Medicine*, *24*(1), 54–59. https://doi.org/10.1016/j.siny.2018.10.002

Zaidman-Zait, A., Mirenda, P., Zumbo, B. D., Wellington, S., Dua, V., & Kalynchuk, K. (2010). An item response theory analysis of the Parenting Stress Index-Short Form with parents of children with autism spectrum disorders. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *51*(11), 1269–1277. https://doi.org/10.1111/j.1469-7610.2010.02266.x

Table 1. Sociodemographic characteristics

	Total	*[Site 1]*	*[Site 2]*	*[Site 3]*	**Significant differences**
Gestational Weeks (N = 45), M (SD)	35.8 (5.1)	38.0 (2.9)	39.0 (2.0)	29.5 (3.8)	F(2,42) = 40.110, *p*<.001
< 37.0 Gestational Weeks, n (%)	19 (42.2)	4 (20.0)	2 (16.7)	13 (100)	$\chi^2(2) = 25.051$, *p*<.001
Child's sex (N = 52), n (%)					-
Female	9 (17.3)	3 (14.3)	1 (5.6)	5 (38.5)	
Male	43 (82.7)	18 (85.7)	17 (94.4)	8 (61.5)	
Child's mean age in months (N = 52), M (SD)	45.4 (13.7)	47.6 (11.9)	47.7 (13.7)	38.8 (15.4)	-
Living situation (N = 52), n (%)					-
With both parents (living together)	42 (80.8)	18 (85.7)	15 (83.3)	9 (69.2)	
With one parent (permanently)	10 (19.2)	3 (14.3)	3 (16.7)	4 (30.8)	
Joint custody	0 (0)	0 (0)	0 (0)	0 (0)	
Type of schooling (N = 52), n (%)					$\chi^2(2) = 7.452$, *p* = .024
Not in school	6 (11.5)	0 (0)	2 (11.1)	4 (30.8)	
Mainstream school	46 (88.5)	21 (100)	16 (88.9)	9 (69.2)	
Special education center	0 (0)	0 (0)	0 (0)	0 (0)	

Siblings (N = 52), n (%)					-
Yes	32 (61.5)	17 (81)	9 (50)	6 (46.2)	
If yes (N = 32), siblings with developmental difficulties, n (%)					-
Yes	9 (28.1)	3 (14.3)	2 (11.1)	4 (30.8)	
SES* (N = 51), n (%)					-
Low and middle-low	11 (21.6)	5 (23.8)	2 (11.1)	4 (33.3)	
Middle	14 (27.5)	6 (28.6)	4 (22.2)	4 (33.3)	
Middle-High and high	26 (51.0)	10 (47.6)	12 (66.7)	4 (33.3)	
Parents with previous interventions of parenting groups (N = 51), n (%)	6 (11.8)	3 (14.3)	1 (5.9)	2 (15.4)	-

*Socioeconomic Status, Standardised calculation with the Hollingshead index.

Table 2. Clinical characteristics at baseline

	Total ***n, (%)***	***[Site 1]*** ***n, %***	***[Site 2]*** ***n, %***	***[Site 3]*** ***n, %***	**Significant differences**
ASD diagnosis (N = 52)	45 (86.5)	21 (100)	18 (100)	6 (46.2)	$\chi^2(2) = 24{,}267$, $p < .000$
DP-3 (N = 51), General development score					

Below average or delayed	41 (80.4)	19 (90.5)	16 (88.9)	6 (50)	$\chi^2(2) = 10{,}132$, $p < .006$
DP-3, Cognition					
Below average or delayed	34 (66.7)	16 (76.2)	11 (61.1)	7 (58.4)	-
DP-3, Motor skills					
Below average or delayed	24 (47.1)	13 (61.9)	8 (44.5)	3 (25.0)	-
DP-3, Communication					
Below average or delayed	39 (76.5)	16 (76.1)	15 (83.3)	8 (66.7)	-
DP-3, Adaptive behavior					
Below average or delayed	33 (64.7)	18 (85.7)	11 (61.1)	4 (33.3)	$\chi^2(2) = 7{,}142$, $p = .028$
VABS-3, total score (N = 57)					
Moderately low or low	53 (93)	22 (100)	20 (95.2)	11 (78.6)	$\chi^2(2) = 6{,}280$, $p = .043$
VABS-3, communication total score (N = 57)					
Moderately low or low	54 (93.1)	22 (100)	19 (90.5)	13 (86.6)	-
VABS-3, daily living total score (N = 57)					
Moderately low or low	51 (89.5)	21 (95.5)	19 (90.5)	11 (78.6)	-

VABS-3, social skills total score (N = 57)					
Moderately low or low	55 (93.2)	22 (100)	21 (100)	12 (75)	$\chi^2(2) = 11{,}532$, $p = .003$

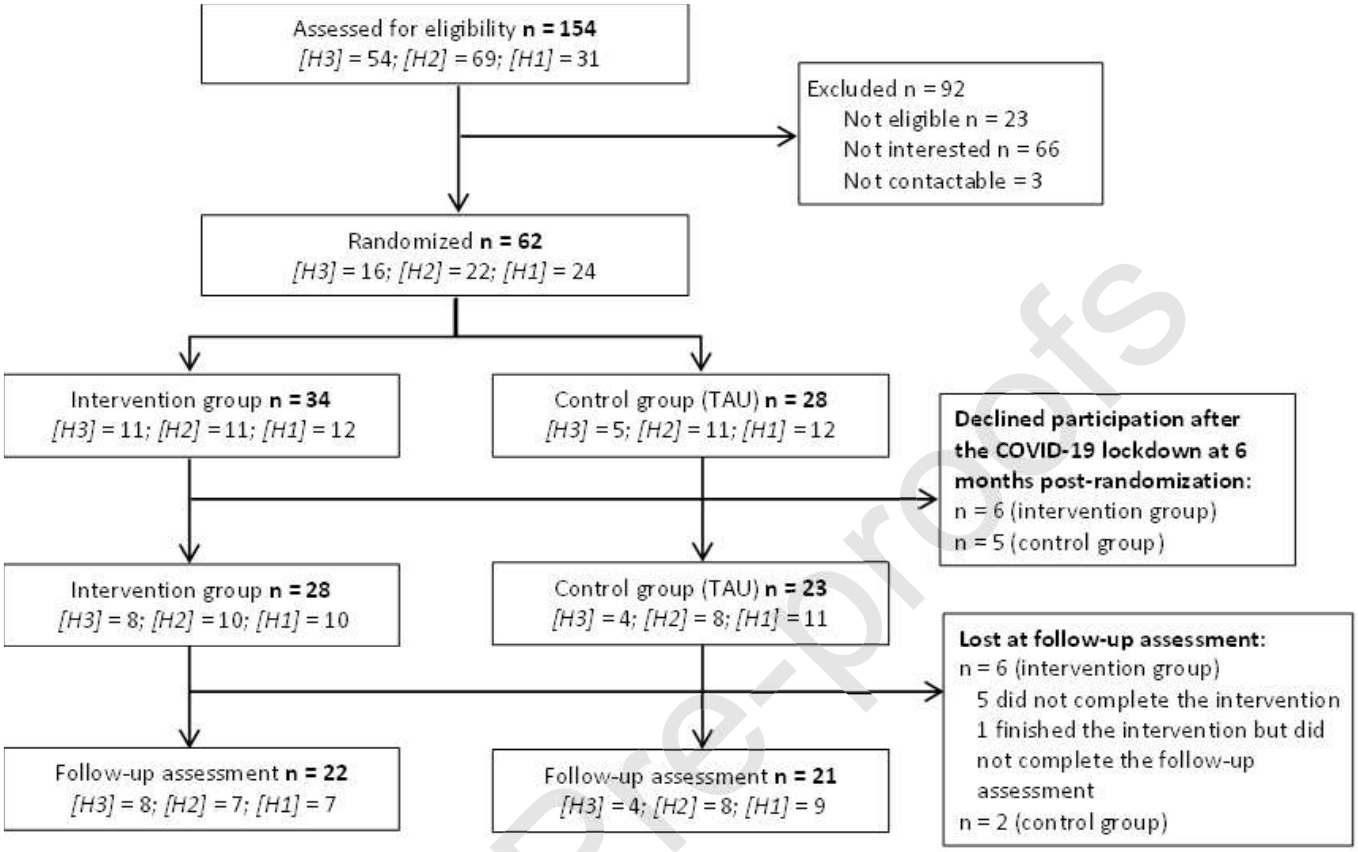
ASD = Autism spectrum disorder; DP-3 = Developmental profile-3; VABS-3 = Vineland adaptive behavior scales-3.

Table 3. Parental satisfaction at the end of the intervention

Parent satisfaction	**Mean score (SD)**
Overall program	6.21 (0.50)
Usefulness of teaching format	6.45 (0.34)
Usefulness of specific parenting techniques	6.39 (0.41)
Group leaders	6.65 (0.61)
Group of parents	6.78 (0.34)

Note: Range 1-7, where 1=not useful at all and 7=extremely useful.

Figure 1. CONSORT diagram illustrating participant flow-chart *[hospital names have been omitted for peer review]*



Note: n = family units; [H3] = [Hospital 3]; [H2] = [Hospital 2]; [H1] = [Hospital 1].

DECLARATIONS OF INTEREST

None.

AMERICAN PSYCHOLOGICAL ASSOCIATION

Journal of Family Psychology

ISSN: 0893-3200

2025, Vol. 39, No. 2, 121–136
https://doi.org/10.1037/fam0001275

Exploring Family Profiles in Explaining Heterogeneity in Parenting Program Engagement and Effectiveness

Joyce Weeland[1], Amaranta de Haan[1], Stephen Scott[2], Maria João Seabra-Santos[3], Carolyn Webster-Stratton[4], Sinéad McGilloway[5], Walter Matthys[6], Maria Filomena Gaspar[7], Margiad Elen Williams[8], Willy Tore Mørch[9], Ulf Axberg[10], Maartje Raaijmakers[11], and Patty Leijten[12]

[1] Youth and Family, Erasmus School of Social and Behavioural Sciences, Erasmus University Rotterdam
[2] Institute of Psychiatry, Psychology and Neuroscience, Kings College London
[3] Center for Research in Neuropsychology and Cognitive Behavioral Intervention, Faculty of Psychology and Educational Sciences, University of Coimbra
[4] Seattle, Washington, United States
[5] Department of Psychology and Social Sciences Institute, Maynooth University
[6] Department of Clinical Child and Family Studies, Utrecht University
[7] Centre for Social Studies, Faculty of Psychology and Educational Sciences, University of Coimbra
[8] Centre for Evidence Based Early Intervention, Bangor University
[9] Regional Centre for Child and Youth Mental Health and Child Welfare, The Arctic University of Norway
[10] Faculty of Social Studies, VID Specialized University
[11] De Opvoedpoli, Regio Utrecht, The Netherlands
[12] Preventive Youth Care, Research Institute Child Development and Education, University of Amsterdam

Parenting programs have proven effective in reducing disruptive child behavior. However, not all families benefit equally, and, to date, we have little insight into who benefits more or less and why. One possible solution is to explore how different potential moderators cluster together in individual families and whether such family profiles predict who benefits more or less from these programs. This study explores (a) how family, child, and parenting risk factors for disruptive behavior cluster together in families enrolled in the popular and evidence-based Incredible Years Parenting Program using latent profile analyses; (b) how family profiles relate to covariate family characteristics; and (c) whether profiles predict program engagement (i.e., number of sessions attended by caregivers) and effectiveness of (i.e., pre–post changes in disruptive behavior). Individual participant data from six studies across four countries (Norway, the Netherlands, England, Portugal) were used, including a total sample of 772 families with children aged 2.5–9 years ($M = 5.14$; $SD = 1.10$; 58.0% boys). Families could be profiled into a low- and high-risk profile, which differed on most child and family (but not parenting) risk factors as well as on covariate family characteristics, such as severity of disruptive behavior. Profile membership predicted engagement in, but not effectiveness of, the program. These findings provide useful insights into the heterogeneity in families participating in parenting programs, although there is a need for further research on how such differences may relate to differences in program effectiveness.

Keywords: disruptive behavior, family risk, moderation, parenting program, profiles

Supplemental materials: https://doi.org/10.1037/fam0001275.supp

Behavioral parenting programs that incorporate parenting and disciplinary techniques for caregivers have consistently been shown to prevent and decrease disruptive child behavior (DB; see for reviews and meta-analyses Bausback & Bunge, 2021; Beelmann et al., 2023; Mingebach et al., 2018). However, these programs are not equally effective for all families. A synthesis of 26 meta-analyses on parenting programs showed that while there is strong evidence that, *on average*, these programs effectively reduce DB, there is

This article was published Online First January 16, 2025.

Arin M. Connell served as action editor.

Joyce Weeland https://orcid.org/0000-0003-2389-5110

Data are not available, but study materials and syntax codes are available (Supplemental Materials 4 and 6 are available at https://osf.io/cewy8/). The material is original; the article has not been submitted elsewhere nor posted on a website. Carolyn Webster-Stratton is the founder of the Incredible Years Series for Parents, Children, and Teachers. Maria Filomena Gaspar, Maria João Seabra-Santos, and Maartje Raaijmakers are Incredible Years mentors and are involved in the dissemination and implementation of the Incredible Years parenting program. The authors declare that they have no other conflicts of interest. Joyce Weeland was supported by a grant of the Netherlands Science Organization (Netherlands Organisation for Scientific Research: 016.Veni.195.387). This research was funded in whole, or in part, by the Netherlands Organisation for Scientific Research (Grant 016.Veni.195.387). For the purpose of open access, the author has applied a CC BY public copyright license to any Author Accepted Manuscript version arising from this submission.

continued

considerable heterogeneity (Mingebach et al., 2018; Weber et al., 2019). Efforts to explain this heterogeneity have typically explored family characteristics that may moderate (i.e., enhance or reduce) program effects. These studies have explored, among others, family (e.g., socioeconomic status [SES], caregiver depression) and child (e.g., severity of DB) characteristics to predict which families benefit more or less (Dedousis-Wallace et al., 2021; Leijten et al., 2020; Piquero et al., 2016).

However, most moderation studies on interventions for children with DB in general (McMahon et al., 2021) and more specifically parenting programs (Leijten et al., 2020) yield inconsistent conclusions. This is mostly true for single effectiveness studies, which are often powered to assess mean program effects and which may, therefore, be underpowered to assess moderator effects (e.g., Weeland et al., 2017). This also seems to be the case, though, for studies that have pooled data across multiple studies and which theoretically have greater statistical power to identify moderators. Few individual family characteristics consistently moderate parenting program effects (Leijten et al., 2020; Leijten, Raaijmakers, et al., 2018).

This raises questions about the methodological and theoretical limitations of traditional approaches to moderation. First, heterogeneity in effectiveness is explained by multiple child, parent, and family characteristics (Klahr & Burt, 2014; McMahon et al., 2021). Theoretical frameworks such as the family system theory (Minuchin, 1988), family stress theory (Hill, 1958), and parental self-efficacy theory (Bandura & Adams, 1977) suggest that such characteristics are likely to interact in complex ways. Such complex interactions elude our traditional moderation studies since these studies use a variable-centered approach. In variable-centered analyses, the covariation among moderator variables is modeled with the assumption that the sample is homogeneous beyond the selected moderator variable (Howard & Hoffman, 2018; McMahon et al., 2021). In short, in these analyses, it is assumed that families may be different on a moderator variable but the same on all other variables. One possible solution may be to assess a constellation of family characteristics that potentially moderate the effectiveness of parenting programs.

Second, most traditional moderator studies focus on single moderators. Moreover, the theoretical basis for the selection of these moderators, and consequently the practical relevance of the findings, is often unclear. Although such moderator studies thus provide some insights into for whom interventions (do not) work, a more holistic approach to understanding the differential effectiveness of interventions necessitates a more comprehensive selection and clustering of (theoretically) based moderator variables. An alternative and potentially more useful approach to moderation may be to select multiple family characteristics based on our *theories* on change. For example, specific clustering of caregiver risk factors may prevent changes in parenting behavior, or a specific clustering of child risk factors may maintain DB in spite of an intervention on parenting. In sum, exploring how these different characteristics cluster within families may help us better predict which families benefit more or less and help us form hypotheses on why this may be the case.

A Family-Centered Approach: Family Risk Profiles

The ways in which different parenting, child, and family characteristics cluster within a family may differ between families. Although families participating in parenting programs may be similar to each other in terms of experiencing their child's behavior as disruptive, they are likely to also be different (and therefore heterogeneous) in other family characteristics. Theoretically, there may be endless numbers of combinations of characteristics and thus many subgroups of families. However, categorizing our populations into all possible subgroups leads to a high Type I error rate and low statistical power (Lanza & Rhoades, 2013). Moreover, it is unlikely that all combinations of characteristics exist in populations and are equally relevant for explaining the effectiveness of interventions. Family-centered analyses (e.g., cluster analysis, latent class/profile, or growth mixture modeling) that cluster families based on their shared characteristics instead of clustering (or factor-analyzing) variables used in traditional variable-centered analyses (e.g., analysis of variance, regression, correlation, factor analysis) may offer a solution to this problem. A family-centered approach in which families are grouped together into latent profiles based on their similarities with families in the same profile and differences with families in other profiles would enable us to model complex multivariate patterns of caregiver, child, and family characteristics. This has the potential to identify subgroups that may be missed using traditional moderation analyses, such as predefined categorical subgroups.

Pioneering studies have successfully used latent profile analyses to assess how different risk factors cluster within families and relate to intervention effectiveness. Interestingly, the indicated family profiles often offer new hypotheses on why some families benefit

Joyce Weeland played a lead role in conceptualization, data curation, funding acquisition, methodology, writing–original draft, and writing–review and editing and an equal role in formal analysis. Amaranta de Haan played a supporting role in writing–original draft and writing–review and editing and an equal role in formal analysis. Stephen Scott played a supporting role in conceptualization, data curation, writing–original draft, and writing–review and editing. Maria João Seabra-Santos played a supporting role in data curation, writing–original draft, and writing–review and editing. Carolyn Webster-Stratton played a supporting role in data curation, writing–original draft, and writing–review and editing. Sinéad McGilloway played a supporting role in data curation, writing–original draft, and writing–review and editing. Walter Matthys played a supporting role in data curation, writing–original draft, and writing–review and editing. Maria Filomena Gaspar played a supporting role in data curation, writing–original draft, and writing–review and editing. Margiad Elen Williams played a supporting role in data curation, writing–original draft, and writing–review and editing. Willy Tore Mørch played a supporting role in data curation, writing–original draft, and writing–review and editing. Ulf Axberg played a supporting role in data curation, writing–original draft, and writing–review and editing. Maartje Raaijmakers played a supporting role in data curation and writing–review and editing. Patty Leijten played a supporting role in conceptualization, data curation, writing–original draft, and writing–review and editing.

Correspondence concerning this article should be addressed to Joyce Weeland, Youth and Family, Erasmus School of Social and Behavioural Sciences, Erasmus University Rotterdam, Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands. Email: weeland@essb.eur.nl

more than others. For example, Dale et al. (2022) classified families participating in *The New Forest Parenting Program* (a home-based manualized intervention for preschoolers with attention deficit hyperactivity disorder (ADHD) into three distinct family profiles, which were mostly characterized by parental depression, parental anxiety, and/or consistently elevated scores across risk factors (high overall family stress). These profiles predicted the extent to which families benefitted from the programs in terms of improving parenting behavior but not child behavior (Dale et al., 2022). Specifically, families with a profile characterized by caregiver depression benefitted the least. The authors hypothesize that caregiver depression increases the likelihood that caregivers respond to DB in a negative way and interfere with their ability to implement effective parenting techniques (Dale et al., 2022).

Similarly, Pelham et al. (2017) found five different family risk profiles in families who participated in the well-known *Head Start* program, a comprehensive service in the United States for economically disadvantaged families. The profiles were characterized by (a) relatively high income, low-risk; (b) low income, lower education, very high maternal depression, high single parenthood; (c) low income, lower education, high single parenthood, otherwise low-risk; (d) lower education, high child behavior problems, very high number of kids, high parental neglect, high maternal depression; and (e) high legal problems, very high neglect, extremely high parental mental health treatment. The authors note that the profiles differ specifically with regard to families' overall risk as well as their demographic and parental mental health risk. These profiles predicted how much families benefitted from the program in terms of decreasing DB. Specifically, families with a profile that was characterized by high overall risk, including demographic and parental mental health risk, benefited from *Head Start*, but the program was not effective for families characterized by low risk or demographic risk (but otherwise low risk; Pelham et al., 2017). The authors hypothesize that families with more risk factors (across domains), that is, those most in need, benefit most from interventions, whereas there may be little to gain in low-risk families.

Thus, the use of a family-centered approach may help us better predict which families are likely to benefit from a specific program and help us form new hypotheses on why. This may help to increase the overall impact and cost-effectiveness of our parenting intervention strategies by, for example, specifically targeting families predicted to benefit most from parenting programs and offering alternative support to those who are likely to benefit little. At the same time, however, there are challenges to using family-centered approaches. First, many studies may not be sufficiently powered to identify less prevalent profiles and to test differential effectiveness between (possibly) multiple profiles. One way to address this and to boost variation in selected variables and power is to combine individual participant data from multiple studies of the same program. Second, the identified profiles only represent heterogeneity across the dimensions included in the model, and it is important, therefore, to provide a strong theoretical basis for the selected variables used in the analyses.

Theories on Change: Choice of Risk Factors

The extent to which a parenting program is effective in reducing DB for an individual family may depend on how well the content and delivery fit the specific combination of risk factors that relate to the etiology, development, or maintenance of children's DB in that specific family. Indeed, the effectiveness of programs in general is the strongest on those family characteristics that are explicitly targeted (Weber et al., 2019). Most parenting programs also address topics beyond parenting behavior merely targeting DB, such as academics, persistence, and social and emotional coaching of children, and beyond parenting behavior, such as caregiver cognitions and emotions or self-care (e.g., Webster-Stratton, 2015). There is some evidence that the effects of these programs also reach beyond parenting behavior (Colalillo & Johnston, 2016; Feldman & Werner, 2002; McGilloway et al., 2012). At the same time, their main focus is on parenting, and the key mechanism of change in DB is parenting behavior. Theoretically, therefore, we may expect that parenting programs are most effective for families in which parenting challenges are more severe. Indeed, it has been shown that caregivers with high initial levels of critical, harsh, and ineffective parenting benefited most from the parenting program Incredible Years (IY; Beauchaine et al., 2005; Reid et al., 2004).

At the same time, families of children with DB are likely to differ from each other in terms of the risk factors that contribute to their children's DB. The risk factors that contribute to the etiology, development, and maintenance of child DB are known to be substantially heterogeneous (Beauchaine & McNulty, 2013; Bolhuis et al., 2017). We selected the factors used for the family risk profiles in the present study based on the strength of empirical evidence from reviews and cohort studies on the etiology of DB. In addition to risk factors in the domain of parenting behavior (i.e., harsh discipline, low positive parenting), two other sets of risk factors for the onset and development of DB in children have been repeatedly identified: child risk factors (specifically emotional problems and hyperactivity) and family risk factors (specifically caregiver depression, age, and education; see for reviews and cohort studies Carbonneau et al., 2022; Gutman et al., 2019; Malcolm-Smith et al., 2023; Petersen et al., 2015). Typically, children with high levels of emotional problems and/or hyperactivity and/or who grow up with younger, less educated, more depressed caregivers are at increased risk of developing DB and continuing to exhibit externalizing behaviors throughout childhood. Parenting programs do not specifically target these risk factors and may be less effective, therefore, for families in whom risk factors for DB are more child- or family-related rather than parenting-related. Indeed, in the example of *The New Forest Parenting Program*, caregivers with a family profile that included high caregiver depression benefited least in terms of changes in parenting behavior, possibly because depression was a disruptive factor in effecting any change (Dale et al., 2022).

The effects of these risk factors on parenting program engagement and effectiveness may be explained in different ways. First, family and child risk factors may temper caregivers' readiness, willingness, and ability to properly engage in the program, thereby indirectly affecting program effectiveness (Brown et al., 2012; Chacko et al., 2016; but see for conflicting results Gross et al., 2015). Family risk factors, such as caregiver financial stress or depression, may increase barriers to participate in a parenting program (Kazdin & McWhinney, 2018; Kjøbli et al., 2014; Rostad et al., 2018), negatively affect program attendance (Chacko et al., 2016; Duppong-Hurley et al., 2016), or affect caregivers' ability to implement the program material in daily life (Barnett, 2008; Tan et al., 2015). For example, families in which caregivers have lower levels of education are more likely to never attend or drop out of parenting programs after enrollment

(Chacko et al., 2016). Moreover, caregivers who perceive more stress and lower quality of life report that a parenting program seems overwhelming and was shown to form poorer therapeutic alliances with practitioners (Kazdin & McWhinney, 2018; Kjøbli et al., 2014; Rostad et al., 2018), although the findings in this regard are mixed (e.g., Pereira et al., 2014; Smith et al., 2018). Overall, the weight of evidence suggests that engagement is crucial. Only through effective engagement will we be able to distinguish between those families for whom the program is less effective because they do not engage versus those who do engage but seemingly do not benefit.

Second, if family and child risk factors are not (properly) addressed and/or persist during program participation, they may limit change in parenting and/or child behavior during or initial effects on parenting and child behavior may fade over time (e.g., families falling back into old behavior patterns). For example, comorbid ADHD symptoms may evoke coercive patterns between caregiver and child (Beauchaine & McNulty, 2013); children's emotional symptoms, such as difficulties in emotional regulation, may maintain DB despite changes in parenting behavior (Scott & O'Connor, 2012); or caregiver financial stress or depression may maintain parenting problems (S. H. Goodman et al., 2020). Indeed, on average, comorbid emotional problems in children and depression in caregivers have been shown to be unaffected by parenting programs (for reviews and meta-analyses, see Buchanan-Pascall et al., 2018; Daley et al., 2018; Leijten, Gardner, et al., 2018). Findings on ADHD symptoms are mixed (see Daley et al., 2018; Groenman et al., 2022). The evidence that these risk factors in isolation moderate program effectiveness has also been mixed (Baumel et al., 2021; Dedousis-Wallace et al., 2021; Leijten et al., 2020; Leijten, Raaijmakers, et al., 2018; Piquero et al., 2016). However, the way they cluster within families may affect the extent to which families engage in and benefit from parenting programs (Griest & Forehand, 1983; Kazdin & McWhinney, 2018; Rostad et al., 2018; Scott & Dadds, 2009).

The Present Study

The aims of this study were to (a) explore, using latent profile analyses, how family, child, and parenting risk factors cluster together in families enrolled in the popular and evidence-based IY parenting program; (b) assess how family risk profile membership covaries with other family characteristics such as minority status, severity of, and change in DB; and (c) investigate the extent to which profile membership predicts caregivers' engagement in and the effectiveness of the IY program. The selected risk factors for inclusion in the latent profile analyses have been identified from research conducted on the onset and development of DB and include caregiver depression, age, and education; child comorbid ADHD and emotional problems; and parenting characterized by low praise and/or high harsh discipline. We hypothesize that (a) parenting programs are most effective in terms of a decrease in children's DB in families with profiles characterized by risk factors primarily in the parenting domain and least effective in families characterized by family and child-related factors, (b) that parenting programs are less effective in families with profiles characterized by risk in the parenting domain *as well as* by risk in one or more other domains, and (c) that families characterized by family risk factors will show the lowest level of program engagement. To maximize variation in risk factors and power, we used *integrated data analysis* by harmonizing (i.e., combining different measures of the same construct) individual participant data from all IY studies with data available on the selected family, child, and parenting risk factors. We pooled data from six studies. The study goals (https://doi.org/10.17605/OSF.IO/CEWY8) and study design were preregistered (https://doi.org/10.17605/OSF.IO/HSD3W).

Method

Procedure

Identification of Eligible Studies

A comprehensive literature search was performed to identify studies with data on the effectiveness of the IY parenting program. We searched for studies in the IY program in the following databases: ERIC, APA PsycInfo, CINAHL, MEDLINE, Embase, Global Health, and Cochrane. The following search terms were used: incredible years.ab OR webster-stratton.ab OR incredible years.ti OR webster-stratton.ti. Inclusion criteria were (a) studies on the IY Parenting Program (toddler/preschool/school age version), (b) in which child behavior (i.e., disruptive behavior, hyperactivity, and emotional problems), parenting behavior (i.e., the use of praise and harsh discipline), and family characteristics (i.e., caregiver age, primary caregiver depression, and education level) were assessed and for which a trial preregistration/protocol and/or results were published in a peer-reviewed journal. No restrictions were placed on the publication year. The search yielded 1,175 citations, and after the removal of duplicates, abstracts of 539 citations were screened for eligibility. Of these 539 citations, 383 were excluded mostly because they did not meet inclusion criteria regarding program or population, and 120 were excluded because they did not measure all the target variables (flowchart in Supplemental Figure S1.1). In cases of doubt about eligibility, authors were contacted for additional information about the trial or data.

Data Collection

Anonymized data were requested for 36 studies. Data from 23 studies were made available, of which 17 studies were excluded after screening of the data because there was no data on item-level available or harmonization of data was not possible (e.g., no available norm scores for the instruments used). Raw, individual item-level and individual participant data were supplied for six trials and checked for consistency with trial protocols and reports. The original studies were conducted in four countries, namely England, the Netherlands, Norway, and Portugal. Information about the studies is provided in Table 1. Ethics committee approval was received for the original studies by the local institutional review board (see references Supplemental Material 3).

Data Harmonization

Each study provided data reflecting the same constructs, based on the same theoretical and operational definitions. Studies mostly used standardized measures or instruments that are well-used in the field of (developmental) psychology and have been validated and normed. However, different measures or instruments were used to assess the same construct across studies, and these measures were not always scaled

Table 1
Characteristics of Included Studies

Trial	Author (year)	Country	Design	IY program	Control condition	Recruitment strategy	n[a]	Child age (M)	% boys	Disruptive behavior problems preintervention (M)[c]	Caregiver depression preintervention (M)[c]	% low educated	% single caregiver	% ethnic minority
1	Larsson et al., 2009	Norway	RCT	BASIC	Wait-list	Screening on DB via outpatient psychiatric clinics	75	6.58	79.5	158.04	7.82	74.3	35.3	4.0
2	Seabra-Santos et al., 2016	Portugal	RCT	BASIC	Wait-list	Screening on DB via university clinics	122	4.64	70.7	185.55	10.10	47.1	20.5	[d]
3	Leijten et al., 2017	The Netherlands	RCT	BASIC	Wait-list	Screening on DB via outpatient psychiatric clinics and schools, open recruitment	156	5.59	67.4	124.21	18.58	47.1	7.1	42.9
4	Posthumus et al., 2012	The Netherlands	Case–control	BASIC + ADVANCED	No active intervention[b]	Screening on DB via office for screening and vaccination	144	4.23	73.5	120.04	17.32	10.9	10.6	[d]
5	Scott, Sylva, et al., 2010	England	RCT	BASIC	Phone helpline	Screening on DB via schools	109	5.46	67.2	118.23	12.42	55.6	53.6	32.0
6	Scott, O'Connor, et al., 2010	England	RCT	BASIC	No active intervention	Recruitment via schools	166	5.16	53.0	104.92	8.69	42.6	40.1	74.4

Note. IY = Incredible Years; DB = disruptive child behavior; RCT = randomized controlled trial.
[a] Number of families from the original study that was included in this study. [b] Only families allocated to the intervention were assessed on caregiver depression and included in this study. [c] Mean sumscore (Eyberg Child Behavior Inventory–Intensity Scale and Beck Depression Inventory). [d] Not reported.

commensurately. Before data from separate studies could be integrated, data were harmonized: recoding of variables so that constructs are scored with identical values in each study. We report how we determined our sample size, all data exclusions, and all manipulations.

Our data harmonization procedures can be characterized as logical harmonization. Our procedures were based on the harmonization procedures of large British cohort studies (McElroy et al., 2020) and procedures used in previous studies on parenting programs using individual participant data from multiple trails (Leijten et al., 2020; Leijten, Gardner, et al., 2018). For most constructs, we selected a primary measure based on which measure was used in the majority of the included studies. Data from studies using a different measure for this construct were converted using norm deviation scores. This way, all scores of individual participants reflect how they deviate from population-specific (based on gender and age) norms. However, for parenting risk factors, this approach was not possible because no norm scores for parenting behavior exist and because in two studies quantitative information about parenting behavior was collected via an interview. For this risk factor, the items that theoretically fitted the same construct from two different measurements were selected. See our harmonization protocol in Supplemental Material 2.

The assessment of harmonizability of the different scales was based on (a) previous studies on the validity, relations between and/or comparability, and measurement invariance of the scales (reported in Supplemental Material 2); (b) previous studies on parenting programs using similar data from multiple trials (Gardner et al., 2019; Leijten, Gardner, et al., 2018); and (c) discussion among coauthors of this article (functioning as expert judges; information on match between items is reported in Supplemental Table S2.1). To explore the validity of the harmonized scales we analyzed correlations between variables in the harmonized data across all original studies (see Supplemental Tables S2.2–S2.7, for correlations per study). Data harmonization is described hereunder per construct. Harmonized data from the separate studies were then merged into a single data file which was used for analyses.

Family Risk Profile Indicators

Child Risk Factors at Baseline

Hyperactivity Symptoms. Studies used the Strengths and Difficulties Questionnaire (SDQ; R. Goodman, 1997, four studies), the Child Behavior Checklist 6–18 years (CBCL; Achenbach & Edelbrock, 1991), or the Child Behavior Checklist 1½–5 years (Achenbach & Rescorla, 2000, two studies) to assess hyperactivity. Previous studies showed that both SDQ and CBCL are valid instruments for assessing hyperactivity (e.g., Riglin et al., 2021; Schmeck et al., 2001) and that the hyperactivity scale of the SDQ is associated with the CBCL attention problem scale (Maurice-Stam et al., 2018; Theunissen et al., 2019; Vugteveen et al., 2021). The scales contain comparable items, for example, "Restless, overactive, cannot stay still for long" versus "Can't sit still/restless/hyperactive" (Supplemental Table S2.1). Moreover, a study among four cohort studies showed that harmonized dimensions of emotional and hyperactivity/inattention problems are invariant across the CBCL and SDQ (Baumann et al., 2024). The SDQ was found to be invariant across different countries; however, findings on cross-country measurement invariance of the CBCL are mixed (Foley et al., 2023; Stevanovic et al., 2017).

The hyperactivity subscale of the SDQ was the most frequently used measure to assess hyperactivity (four studies). This scale consists of five items measured on a 3-point scale (0 = *not true*, 1 = *somewhat true*, and 2 = *certainly true*). Two studies used the CBCL attention problems scale, respectively consisting of 10 and five items measured on a 3-point scale (1 = *not true*, 2 = *somewhat or sometimes true*, 3 = *very or often true*). Age- and gender-specific population means and standard deviations were used to convert standardized CBCL sum scores into SDQ sum scores (Supplemental Material 2).

Emotional Problems. Studies used the SDQ (four studies) or CBCL (two studies) to measure emotional problems. Previous studies showed that both SDQ and CBCL are valid instruments for assessing emotional problems (e.g., Ferdinand, 2008; R. Goodman et al., 2003) and that the emotional symptoms scale of the SDQ is associated with the CBCL anxious-depressed scale (Maurice-Stam et al., 2018; Theunissen et al., 2019; Vugteveen et al., 2021). The scales contain comparable items, for example, "Often unhappy, depressed or tearful" versus "Unhappy, sad, or depressed" (Supplemental Table S2.1). The emotional symptoms subscale of SDQ (R. Goodman, 1997) was most often used to measure emotional problems (four studies) and was therefore chosen as the primary measure. The emotional symptoms scale consists of five items measured on a 3-point scale (0 = *not true*, 1 = *somewhat true*, and 2 = *certainly true*). Two studies used the CBCL 4–18 years or CBCL ½–5 years anxious/depressed scale consisting of respectively 13 items and eight items measured on a 3-point scale (1 = *not true*, 2 = *somewhat or sometimes true*, 3 = *very or often true*). Age- and gender-specific population means and standard deviations were used to convert standardized CBCL sum scores into SDQ sum scores (Supplemental Material 2).

Family Risk Factors at Baseline

Caregiver Education. Primary caregiver education was used as a marker of SES. Caregivers' formal education level was classified using the International Standard Classification of Education (UNESCO Institute of Statistics, 2011) and collapsed into three categories: 1 = secondary education or less, 2 = postsecondary education but not university, 3 = bachelor's degree or higher. Low level of caregiver education is seen as a risk factor for DB.

Caregiver Age. Caregivers' age at the time of the birth of the target child (i.e., for which they receive IY) was calculated by subtracting the age of the target child from the age of the primary caregiver. Younger age at time of children's birth is seen as a risk factor for DB.

Caregiver Depression. Depression was assessed with the Beck Depression Inventory (BDI; Beck & Beamesderfer, 1974, two studies), the General Health Questionnaire–12 (GHQ-12; Goldberg et al., 1997, two studies) or the Symptom Checklist (SCL; Arrindell & Ettema, 2005, two studies). Previous studies showed that all three instruments are valid measures to screen for depression in the general population (e.g., Aalto et al., 2012; Lasa et al., 2000; Lundin et al., 2015) and that scores on the BDI and GHQ were associated, as well as the BDI and SCL depression scale (Koeter, 1992). The instruments contain comparable items, such as "I feel I am a complete failure as a person" versus "Been thinking of yourself as a worthless person" versus "Feelings of worthlessness" (Supplemental Table S2.1). The BDI was found to be invariant across different countries (Dere et al., 2015; Nuevo et al., 2009). However, information about measurement invariance of the other scales is lacking.

The BDI was used as the primary measure for caregiver depression. This scale consists of 21 items measured on a 4-point scale (0 = *not at all* to 3 = *severely*). The 12 GHQ items are measured on a 4-point scale (ranging from *better/healthier than normal* option to a *much worse/more than usual*). The Depression subscale of the SCL consists of 16 items measured on a 5-point Likert scale (0 = *not at all* to 4 = *extremely*). Population means and standard deviations were used to convert standardized GHQ and SCL sum scores into BDI sum scores (Supplemental Material 2). For one study, caregiver depression was only assessed in families who were allocated to the intervention condition.

Parenting Risk Factors at Baseline

Parenting risk factors consist of both the presence of negative parenting behavior and the absence of positive parenting behavior. Based on a previous parenting profile analysis, caregivers' low self-reported use of praise and high self-reported use of harsh discipline were used as markers for parenting risk (Weeland et al., 2023). In most studies (five studies), parenting behavior was measured using the Parenting Practice Interview questionnaire (Webster-Stratton, 2001). The Parenting Practice Interview was therefore used as primary measure. In two studies, parenting behavior was measured with a Parenting Interview (Dowdney et al., 1985). Items from the questionnaire and interview questions that theoretically measured the same construct were matched. Almost identical questions were used across instruments, namely: for praise: "How often do you praise or compliment your child when your child behaves well or does a good job?" versus "How many times per day did you praise your child for doing something you asked them or doing something well?" for harsh discipline: "How often do you do each of the following things when your child misbehaves? Slap or hit your child (but not spanking)" versus "Thinking about last week, how many times did you give your child a tap or smack if he/she misbehaved." One questionnaire item was selected to measure praise and six to measure harsh discipline ($\alpha = .86$). Response scales were harmonized to reflect the response scale used most frequently, which was a 7-point Likert scale. Scores from the interview were therefore converted from a 5-point to a 7-point Likert scale (Supplemental Material 2).

Distal Outcome: Disruptive Child Behavior

Changes in DB between pre- and posttest were used as the distal outcome (i.e., the observed variable that is predicted by the latent categorical variable) and assessed using the Eyberg Child Behavior Inventory–Intensity Scale (ECBI; Eyberg & Pincus, 1999, five studies) or SDQ "Conduct Problems" subscale (one study). Both instruments have been shown to be valid screening measures for conduct problems in children (e.g., Abrahamse et al., 2015; R. Goodman et al., 2003), and previous studies have shown that the ECBI intensity and SDQ conduct problem scales are associated (Abrahamse et al., 2015). The instruments contain comparable items, such as "Often loses temper" versus "Has temper tantrums." The SDQ was found to be invariant across different countries (Foley et al., 2023; Stevanovic et al., 2017); however, studies on measurement invariance of the ECBI are lacking.

The most frequently used measure for caregiver-reported DB was the ECBI, consisting of 36 items measured on a 7-point Likert scale

(1 = *never* to 7 = *always*). For one trial, scores on SDQ "Conduct Problems" subscale were therefore converted into the five-item ECBI Intensity Scale. The SDQ Conduct Problem subscale age- and gender-specific population means and standard deviations (Maurice-Stam et al., 2018) were used to calculate standardized sum scores, which were converted to ECBI sum scores (Weeland et al., 2018; Supplemental Material 2).

Participants

The total integrated sample from the studies included data on 772 families (Table 1). Children were aged 2.5–9 years old ($M = 5.14$; $SD = 1.10$; 58.0% boys). Most caregivers were female (96.9%), approximately one quarter of caregivers were single (26.1%), half (54.8%) reported to be part of an ethnic minority, and 43.1% were educated to secondary level or lower. If multiple caregivers from one family were included in the study, we used data from one caregiver. All participants gave informed consent for participation in the original study (Supplemental Material 3).

Intervention

In each of the studies, families were allocated to an intervention (57.0%) or control (43.0%) condition. Families in the intervention condition were offered the IY parenting program (Webster-Stratton, 2008; 2015). IY is a group behavioral parent training program that starts with the focus on positive parenting strategies such as child-led play, social and emotional coaching, praise, and incentives, before discussing effective limit setting, ignoring unwanted behavior, and finally, consequences of DB, problem-solving skills, and time-out strategies. IY uses a collaborative setting in which group leaders establish themselves as facilitators rather than as experts (Webster-Stratton, 2012). Group leaders encourage caregivers to solve problems and to help one another in this regard to ensure maintenance of the intervention effects. The IY program is specifically designed to attune to variations in, among others, caregivers' cognitions and learning skills. In all studies, at least one of the two group leaders in each group was a certified IY group leader or was undergoing certification process (Supplemental Table S3.1). The number of sessions offered to participants in the included studies ranged from 12 to 18, depending on the version of the program. Caregivers across studies attended, on average, 73% of the sessions offered to them (range from 0 [4.5%] to all [19.0%]). Families in the control condition were either on a waitlist for IY (three studies), received a minimal intervention through the study (e.g., a phone helpline; one study), or received no active intervention through the study (two studies).

General Effects of the IY Intervention on Disruptive Child Behavior

The treatment condition predicted DB at T2; that is, families who received IY reported on average less DB at T2 than those families who did not (small effect, Cohen's $d = .27$). See Supplemental Material 4. We calculated individual reliable change indexes to evaluate whether a change within a child's DB is greater than a difference that could have occurred due to random measurement error (i.e., reliable) and is clinically meaningful (Jacobson et al., 1999). For the calculation of these indexes, we used the ECBI means and standard deviation of DB at T1 and T2 of the sample; the ECBI means and standard deviation of a well-functioning normal population (Weeland et al., 2018); and the ECBI test–retest reliability (Abrahamse et al., 2015). One fifth (20.4%) of children of families in the intervention condition showed recovery or clinically significant improvement (vs. 7.3% in the control group). Thus, although, on average, the intervention had a significant effect on DB, there was large heterogeneity in effect size between individual families. This emphasizes the importance of understanding heterogeneity in intervention effectiveness.

Main Analysis

Data were analyzed using M*plus* (Muthén & Muthén, 2017). A three-step latent profile analysis (i.e., a class analysis with continuous and categorical data) with distal outcomes was used to identify family risk profiles and to explore whether profile membership predicted parenting program engagement and effectiveness (Asparouhov & Muthen, 2013). Latent profile analyses are commonly used for identifying subpopulations within a population based on a certain set of variables and are a statistically sophisticated technique to identify finite subgroups that are not directly observable (Ferguson et al., 2020; Lanza & Rhoades, 2013).

Step 1: Determination of Latent Profiles

In step one, the number of latent family profiles is determined without the distal outcomes that will be part of the secondary model. The profile indicators were based on preintervention data on parenting (praise and harsh discipline), family (caregiver age, education, and depression), and child (hyperactivity symptoms and emotional problems) risk factors. Missing data on these profile indicators ranged from 6.7% (for caregiver education) to 19.8% (caregiver depression). When compared to complete cases, those with missing data on profile indicators had younger children, were more likely to be allocated to the control group, and less likely to identify themselves as part of an ethnic minority. To address missing data patterns and maximize the number of families we could classify in a profile (i.e., prevent listwise deletion during profile allocation) we used multiple imputation, simulating random draws from the posterior distribution of the missing scores. These scores were generated using all profile indicators, and the indicators of missing data. We used 50 imputed data sets.

Latent profile analyses from one- to five-profile solutions were run sequentially on the 50 imputed data sets and were evaluated based on (a) three fit indices (Bayesian information criterion [BIC], Akaike information criterion [AIC], and the Lo–Mendell–Rubin adjusted [LRT] test), (b) entropy (i.e., estimate of the probability that each participant is in each of the classes) and mean class probabilities, (c) profile size (i.e., at least 5% of participants in each profile), and (d) theoretical plausibility (i.e., whether subgroups seem theoretically meaningful). After the selection of the best profile solution, we reran the class analysis on one of the imputed data sets, fixing the profile indicators based on the output in Step 1.

Step 2: Allocation to Latent Family Profile and Determining Measurement Error

In Step 2, families were allocated to one of the profiles based on the profile solutions selected in Step 1. We based allocation on the

profile that has the highest probability for the individual family. In this step, we also retrieved the measurement error for the most likely profile (i.e., Logits for the Classification Probabilities of the Most Likely Latent Class Membership), which will be used in Step 3. Profile membership and probability scores were merged with the larger data set.

Step 3: Relation Between Profiles and Distal Outcomes

In Step 3, the relationship between profile membership and distal outcomes (i.e., predicted parenting program engagement and effectiveness) was assessed while accounting for classification errors determined in Step 2. In all steps, we report 95% confidence intervals (CI) of means or paths for each profile (nonoverlapping CI indicating significant differences).

We did this in two phases: We first explored whether and how families allocated to different profiles differed from each other on the profile indicators as well as other child and family characteristics (other than those used to identify the profiles), specifically experimental condition (percentage allocated to IY), minority status (percentage minority status), family composition (percentage single caregivers), and DB at T1. Second, we tested whether families allocated to different profiles showed different engagement in (i.e., percentage of attended IY sessions) and differentially benefited from IY (i.e., path from condition to DB at T2 and path from condition to reliable change score). In this step, we controlled for the original study of origin, gender, and DB stability (i.e., relation between DB at T1 and T2). Data are not available, but study materials and syntax codes are available (https://osf.io/cewy8/). The syntax codes for Steps 1 and 3 are found in Supplemental Material 6.

Results

Step 1: Determination of Latent Profiles

The sequential profile analyses showed that AIC and BIC decreased when the number of profiles increased, indicating increased model fit with more profiles. The LRT test was only significant for the step from 1 to 2 profiles and from 3 to 4 profiles, but not so from 2 to 3 profiles or from 4 to 5 profiles. Entropy increased with rising numbers, but class probabilities decreased. For the two-profile solution, the smallest profile consisted of 45.7% of participants, but this percentage dropped under 5% from the three-profile solution onward (Table 2). We decided on a two-profile solution since (a) the fit of a two-profile solution was significantly better than a one-profile solution; (b) entropy was satisfactory (.82); and class probabilities were high (above .92 for both profiles), indicating that participants could be allocated to a certain profile with high probability; (c) the sizes of both profiles were substantial; and (d) this solution seems theoretically plausible since at face value, the profiles indicated that most risk factors were higher in one profile than the other.

Step 2: Allocation to Latent Family Profile and Determining Measurement Error

Families in the two profiles scored significantly different on all child risk factors and on most family risk factors (except for caregiver depression) but did not differ with regard to parenting-related factors (Table 3). Families in Profile 1 reported significantly more child emotional problems and hyperactivity symptoms, and caregivers had lower levels of education and were younger at the time the target child was born when compared to families in Profile 2. Thus, we labeled Profile 1 as "high risk" and Profile 2 as "low risk" profile (i.e., relative to the other profile; Supplemental Figure S5.1). We explored whether these profiles differed on child and family other than the profile allocators (Table 4). The profiles did not differ on the percentage of families allocated to the intervention condition, but they did differ on minority status, the percentage of single caregivers and DB at T1. Families in the high-risk profile were more often majority and single caregiver families, of which the child scored higher on DB at pretest than families in the low-risk profile.

Step 3: Relation Between Profiles and Distal Outcomes

The sample size in the secondary model was lower due to missing data in the distal outcome, but the distribution of families across profiles remained similar (entropy = .658, lowest class probability = .923). Results of the model showed that, (a) based on the percentage of IY sessions attended by caregivers, engagement significantly differed between profiles and (b) that IY had a significant effect on DB at posttest in both profiles. High-risk families allocated to the intervention group on average attended less session than low-risk families in the intervention group. In both profiles, caregivers who were allocated to the intervention group on average scored their child lower on DB at posttest compared to caregivers in the control condition in both profiles (Table 5). Importantly, this effect of IY on DB problems did not significantly differ between the profiles (for βs, 95% CI of βs and Cohen's *d*, see Table 5).

Table 2
Results Latent Profile Analyses

No. of profile	AIC	BIC	LRT[a]	Entropy	Lowest class probability	Smallest class (%)
1	25381.700	25446.786				
2	24973.170	25075.448	.0000	.822	.921	45.70
3	24808.638	24948.107	.5657	.875	.907	4.98
4	24673.083	24849.745	.0129	.880	.837	4.73
5	23451.095	23664.949	.1053	.906	.749	4.52

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion; LRT = Lo–Mendell–Rubin adjusted.
[a] Not available for multiple imputation, this test is therefore based on listwise deletion data.

Table 3
Latent Family Risk Profiles

	Child risk factor				Family risk factor						Parenting risk factor			
	Emotional problem[a]		ADHD symptom[a]		Caregiver depression		Age at birth focus child[a]		SES[a]		Caregiver use of praise		Caregiver use of harsh discipline	
Family profile	*M* 95% CI	% clinical range/at risk[b]	*M* 95% CI	% clinical range/at risk[b]	*M* 95% CI	% clinical range/at risk[b]	*M* 95% CI	% <20 years of age	*M* 95% CI	% low educated	*M* 95% CI	% clinical range/at risk[b]	*M* 95% CI	% clinical range/at risk[b]
High risk (n = 387)	[2.98, 3.53]	37.40	[6.05, 6.60]	51.60	[11.87, 14.92]	30.30	[27.04, 28.41]	12.00	[1.10, 1.39]	85.90	[4.78, 5.15]	15.50	[1.65, 1.93]	8.30
Low risk (n = 384)	[2.32, 2.82]	31.30	[4.53, 5.15]	33.10	[10.30, 13.21]	22.10	[30.85, 31.90]	1.10	[2.68, 2.77]	0.00	[4.99, 5.32]	13.20	[1.72, 2.02]	10.40

Note. SES = socioeconomic status; CI = confidence interval; ADHD = attention deficit hyperactivity disorder.
[a] Significantly different between profiles. [b] For emotional problems: a sumscore above 3 (90th percentile found in Maurice-Stam et al., 2018); for ADHD symptoms: a sumscore above 6 (90th percentile found in Maurice-Stam et al., 2018); for caregiver depression: score of 16 or higher (Beck & Beamesderfer, 1974); for caregiver use of praise: 1 *SD* below mean risk group (<3.56, see Van Aar et al., 2019); for caregiver use of harsh discipline: 1 *SD* above mean at risk group (>3.53, see Van Aar et al., 2019).

Discussion

Parenting programs to prevent and decrease DB are not equally effective for all families. In the present study, we (a) assessed family profiles based on theoretical and empirical research on risk factors for the onset, development, and maintenance of DB; (b) explored whether and how these profiles differed on covariate family characteristic and (changes in) child behavior; and (c) analyzed whether and how latent family risk profiles predicted differential engagement in, and effectiveness of, the Incredible Years parenting program. Our results indicated that families could be allocated into a low- versus high-risk profile (Aim 1). Families in low- and high-risk profiles differed on covariate characteristics, such as being a single caregiver household and severity of DB (Aim 2), and they differed in their engagement but not in the extent to which they benefited from IY (Aim 3).

The identified profiles varied in terms of most the predefined child (i.e., hyperactivity symptoms and emotional problems) and family (i.e., caregiver education and age at time of birth of the child; but not parenting) risk factors for DB and are therefore labeled low- and high-risk profiles. These profiles may be in line with theoretical frameworks explaining how risk factors within a family interact across domains and, in some cases, maintain or intensify each other (Barnett, 2008; Cowan et al., 1998; Kreppner & Lerner, 1989; Masarik & Conger, 2017) and empirical research showing that multiple child and family risk factors tend to cluster within families (Beauchaine & McNulty, 2013; Mullola et al., 2021). However, the identified profiles did not differ on parenting risk factors (i.e., low parental praise and high harsh punishment) or caregiver depression. This is in line with previous profile studies showing that caregiver depression or parenting problems do not necessarily cluster together with other risk factors (see Pelham et al., 2017).

One possible explanation may be that since the study relies on caregivers' self-reported data, the caregiver may not perceive themselves differently in, for example, parenting risk; in reality, differences may exist. Self-reported data may reflect differences in caregivers' awareness of their own behavior or processes underlying how caregivers report on their own and their child's functioning, such as feelings of self-efficacy, attributions about child behavior, or (dis)stress (Herbers et al., 2017). In the present study, however, caregiver depression was high (>20% of caregivers across profiles scored in the clinical range) compared to the average prevalence across 27 European countries (6.38%, Arias-de la Torre et al., 2021). This indicates that in many families of children showing DB, caregiver well-being is affected. This could also indicate a selection effect. Although findings are mixed, there are studies showing that caregivers who perceive parenting stress are more likely to engage in an intervention (Pereira et al., 2014; Smith et al., 2018).

Regarding covariate family characteristics, families with a high-risk profile were more often single caregiver families, with an older child who showed more severe DB before the intervention compared to families with a low-risk profile. The largest differences between profiles on the predefined risk factors seemed to be on caregiver age and education: Most caregivers who became a parent in their teens and caregivers with lower levels of education were allocated to the high-risk profile. The clustering of preselected risk factors for DB families allocated to the high-risk profile and their relation to other family characteristics could indicate increased stress and a lack of social support in these families (Bull & Mittelmark, 2009;

Table 4
Profile Exploration

Profile	Study characteristic	Family characteristic		Disruptive child behavior
	Condition (% IY)	Minority status (%)[a]	Family composition (% single caregivers)[a]	Disruptive child behavior T1[a]
High risk	50.6–60.7	41.4–54.6	26.9–56.8	135.26–144.53
Low risk	52.8–62.9	56.2–69.6	16.7–25.0	123.58–132.73

Note. IY = Incredible Years; T = time.
[a] Significantly different between profiles.

Liang et al., 2019), which may show that those in the high-risk profile are most in need of support. Overall, the identified profiles may show that specifically demographic characteristics (i.e., low SES, low caregiver age, single caregivers) distinguish between different families attending parenting programs.

Families allocated to the high-risk profile who received IY on average attended less sessions than those allocated to the low-risk profile. This is in line with previous studies showing that families with problems in multiple domains more frequently drop out of parenting programs and attend less sessions, possibly because the program seems overwhelming or because they experience more barriers to attend sessions (Kazdin & McWhinney, 2018; Kjøbli et al., 2014; Rostad et al., 2018). Importantly, we did not find evidence that these families benefited less from the program directly after the intervention. This contradicts our expectation that family profiles characterized by severe parenting risk would benefit most and profiles characterized by high caregiver and child risk would benefit least, since parenting programs are not designed to treat these problems. However, it is in line with results of previous variable-centered analyses on differential effectiveness of parenting programs showing that risk factors for DB such as comorbid ADHD and emotional problems or caregiver depression in isolation do not reduce effects (Baydar et al., 2003; Leijten et al., 2020). It may be that positive changes in parenting lead to positive changes in child behavior, also in the presence of other risk factors. Parenting was indeed found to mediate the effects of cumulative risk factors on later child externalizing problems (Gach et al., 2018).

The IY program is a collaborative program specifically designed to attune to variations in, among others, caregivers' cognitions and learning skills. Group leaders may thus tailor program content to specific characteristics and needs of families. This means that IY may benefit different families in different ways: For some, this may occur through changes in parenting or child behavior, while for others, it may relate to an increased understanding of child behavior, changes in caregiver cognitions or emotions, or increased social support through interactions with other caregivers (Feldman & Werner, 2002; Forehand et al., 2014). Even in the absence of changes in child behavior, caregivers may experience parenting programs as beneficial to them, for example, due to small but important changes in their perceptions of their child's behavior because they feel less anxious or more supported (McKay et al., 2021). One way to further increase our understanding of differential effects of parenting programs such as IY may be by exploring different and multiple outcomes of parenting programs, such as caregiver cognitions, stress, experienced support, or understanding of child behavior (development).

Our study has both important strengths and limitations. First, we used a theory-driven, family-centered approach to heterogeneity in intervention effects, aiming to elucidate different processes that exist within individual families. Latent profile analysis is a sophisticated approach to moderation that, compared to more traditional approaches, reduces type I error rates and improves power to assess higher order interactions (Lanza & Rhoades, 2013). This enabled us to model how multiple potential moderators naturally cluster together in families and affect program engagement and effectiveness and to test complex hypotheses on why some families may benefit more than others from parenting programs. At the same time, because profile allocation is based on probabilities, there is always some uncertainty since the "true" profile membership is unknown (Lanza & Rhoades, 2013). Replication and further validation of family profiles, for example, in data on other parenting programs, is needed.

Second, we preselected risk factors based on theory and our current understanding of change during a parenting intervention and how this relates to the risk factors involved in the maintenance of DB. This is important to enhance our understanding of *why* some families benefit more or less. However, many more risk factors for

Table 5
Differential Engagement and Effectiveness

Family profile	Engagement in intervention*		Effectiveness on disruptive behavior[a]					% clinically significant improvement T1–T2[b]	
	% session attended	95% CI	β	*SE*	*p*	95% CI	Cohen's *d*	Control	IY
High risk	62.18	[56.37, 68.01]	−.207	.044	<.001	[−.293, −.120]	−.299	8.70	25.30
Low risk	85.59	[83.30, −87.89]	−.077	.038	.042	[−.151, −.003]	−.240	5.70	16.30

Note. Values in asterisk indicate significant difference between profiles. T = time; CI = confidence interval; *SE* = standard error; IY = Incredible Years.
[a] Effect of condition on child behavior at T2. [b] Effect of condition on clinically significant change in Profile 1: β = −2.66 (95% CI [−.376, −.157]), *SE* = .056, $p < .001$; in Profile 2: β = −.158 (95% CI [−.284, −.032]), *SE* = .064, $p = .014$.

DB have been identified and may be important factors in the effectiveness of our intervention strategies, albeit it is not possible to include all of these in any one study. Children with DB are very heterogeneous and there may be subpopulations that need a more personalized approach. Future research could explore profiles based on children's behavioral symptoms, such as callous unemotional traits (Perlstein et al., 2023), irritability (Bolhuis et al., 2017), proactive aggression, or anxiety (Rosa-Justicia et al., 2022). In general, there is a need for more (rigorous) research on such personalized procedures and adapted or personalized interventions for children with DB (review by Lane et al., 2023).

Third, the use of pooled individual participant data from multiple studies resulted in a larger and more diverse sample than is available in single studies and increased power to assess family risk profiles as a moderator of intervention effectiveness. Our studies illustrate the possibilities of international collaboration in (re)using existing data. Including families from different countries may have both advantages (e.g., diverse sample) and disadvantages (e.g., different norms for behaviors; see Weeland et al., 2018). The use of existing data also comes with limitations. Specifically, integration of data across studies can be challenging. In our study, different instruments were used across studies to assess the same construct. We opted for a logical approach to data harmonization. We harmonized scales from different instruments based on the clinical conceptualizations of the problems/disorders they assess and for which reliability and validity have been studied. For each individual participant, across all original studies, the harmonized score reflects how that individual participant deviates from the norm on that specific scale. We feel this approach strengthens the clinical relevance of our approach and of the study results. It enables the assessment of the theoretical and clinical relevance of the found profiles and enables translation to clinical practice. For example, because we can identify families that may fall within a certain profile in future practice, and this may help us personalize our prevention and intervention strategies. However, this approach also has important limitations since it assumes the selected scales and items within the scales measure a construct equivalently across studies. This may not always be the case. Similarly named scales do not necessarily measure the same construct (i.e., the jingle fallacy; Weidman et al., 2017). Moreover, even identical items may function differently across studies due to—for example, regional or cultural differences in interpretation or placement of the items within study-specific test batteries (Bauer & Hussong, 2009; Holland & Dorans, 2006). Findings on measurement invariance for often used instruments such as the SDQ, CBCL, or BDI are mixed (Foley et al., 2023; Nuevo et al., 2009; Stevanovic et al., 2017). There is a strong need for more cross-country measurement invariance studies (Stevanovic et al., 2017).

Moreover, the use of existing data may limit what can be assessed. For example, because not all studies included follow-up data (e.g., due to a waiting list design), we only assessed immediate effects of parenting programs on child behavior. Therefore, we cannot rule out that family risk profiles may predict the extent to which intervention effects are sustained. Limited knowledge about long-term parenting program effects, and especially about differential long-term effects, is a severe limitation of the field. Families with high-risk profiles may be at increased risk for problems to return, maintain, or even intensify over time. In general, possibilities for the integration of individual participant data would benefit from standard measures and measure procedures across studies.

Fourth, we focus on both engagement and effectiveness. This is important in terms of distinguishing between families for which the program is less effective because they do not engage and those who do engage but seemingly do not benefit. Our measure of engagement was limited to the number of sessions caregivers attended. For future studies, it may be important to structurally include different measures of program fidelity and engagement, such as homework completion or therapeutic alliance (e.g., having shared goals and the bond between caregiver and group leader).

Clinical Implications

The results reported here may help to further strengthen the effectiveness of parenting programs, such as IY, in different ways, despite the fact that the identified profiles did not predict differential effectiveness. First, it is important to note that the low-risk profile is considered low-risk *relative to* the high-risk profile but is not necessarily low-risk when compared to the general population. Although approximately half of the families in this study were characterized as low-risk, substantial proportions nevertheless showed comorbid children's emotional problems (31%), ADHD symptoms (33%), and caregiver depression (22%). The fact that so many families in these samples—across profiles—reported problems in multiple domains may be important for clinical practice; these families are clearly dealing with challenges beyond their child's DB. It may be important to address these more explicitly both before and during the program.

Discussing a family's specific circumstances, challenges, and their children's behavioral symptoms before they enroll in an intervention may create an opportunity to increase engagement and boost program effectiveness. It has been shown that caregivers' who feel their family's situation was assessed prior to enrollment in a parenting program perceived this program as more beneficial, compared to caregivers who felt their individual issues were never considered (McKay et al., 2020). During the program, it may be important to address family issues beyond parenting, such as issues with caregiver well-being, partner, or coparenting relations that may limit change in parenting and child behavior. In many parenting programs, including IY, ways to do this are already incorporated in the program. Although evidence for the effectiveness of including content beyond parenting in parenting programs is mixed, a recent meta-analysis showed that for families with high clinical scores of DB, albeit not in prevention settings, the inclusion of techniques aimed at improving caregiver well-being enhanced overall program effectiveness (Leijten et al., 2019). Addressing this may have consequences for the needed intensity and duration of the program and qualifications and experience of group leaders. Moreover, for some of these issues, it may be important for all caregivers to participate in the program (Weeland et al., 2021). Currently, in many cases, one caregiver (mostly mothers) participates.

Second, similar to data on this from other studies (see review by Chacko et al., 2016), families on average attended approximately three quarters of the program sessions. This is important since research has suggested that engagement is related to program outcomes (Boggs et al., 2004; Patterson & Chamberlain, 1994). There thus seems room for improvement. Group leaders could have a significant role here by, for example, offering "make up" sessions and tailoring for factors that may relate to families dropping out (e.g., culture, family context, and child developmental level). Indeed, the IY program offers group

leaders ways to do this. This may be specifically important for families in vulnerable circumstances, such as those allocated to the high-risk profile. These families attended less sessions (i.e., 62%) than average (i.e., 73%) and significantly less sessions compared to families in the low-risk profile (i.e., 86%). Future research could also explore (additional) ways to boost caregivers' engagement in parenting programs to investigate questions such as: whether discussing family problems beyond child behavior before the start of the program reduces barriers to participate; whether caregiver engagement is greater when comorbid problems are addressed first (i.e., stepped care); and whether this, in turn, enhances effectiveness (Weeland et al., 2021).

Conclusion

Finding new ways to further strengthen the impact and cost-effectiveness of our prevention and intervention strategies may be the most significant upcoming challenge in intervention research. Our study confirms that IY is effective in reducing DB but that the heterogeneity in effectiveness is large and difficult to predict. Although families participating in parenting programs are similar in that they experience difficulties with their children's behavior, they also differ in many ways. In this study, these differences were related to the severity and development of child behavior problems, but these factors did not predict the extent to which families engaged in and benefited from the parenting program. The results of our profile analyses are important in helping us to better understand heterogeneity in families participating in parenting programs, but more work is needed to enable us to better predict and understand heterogeneity in effectiveness.

References

Aalto, A. M., Elovainio, M., Kivimäki, M., Uutela, A., & Pirkola, S. (2012). The Beck Depression Inventory and General Health Questionnaire as measures of depression in the general population: a validation study using the Composite International Diagnostic Interview as the gold standard. *Psychiatry Research*, *197*(1–2), 163–171. https://doi.org/10.1016/j.psychres.2011.09.008

Abrahamse, M. E., Junger, M., Leijten, P. H. O., Lindeboom, R., Boer, F., & Lindauer, R. J. L. (2015). Psychometric properties of the Dutch Eyberg Child Behavior Inventory (ECBI) in a community sample and a multi-ethnic clinical sample. *Journal of Psychopathology and Behavioral Assessment*, *37*(4), 679–691. https://doi.org/10.1007/s10862-015-9482-1

Achenbach, T. M., & Edelbrock, C. (1991). Child Behavior Checklist. *Burlington (vt)*, *7*, 371–392. https://www.scirp.org/reference/referencespapers?referenceid=2549727

Achenbach, T. M., & Rescorla, L. A. (2000). *Manual for the ASEBA preschool forms and profiles*. University of Vermont, Research Centre for Children, Youth and Families.

Arias-de la Torre, J., Vilagut, G., Ronaldson, A., Serrano-Blanco, A., Martín, V., Peters, M., Valderas, J. M., Dregan, A., & Alonso, J. (2021). Prevalence and variability of current depressive disorder in 27 European countries: A population-based study. *The Lancet Public Health*, *6*(10), e729–e738. https://doi.org/10.1016/S2468-2667(21)00047-5

Arrindell, W. A., & Ettema, J. H. M. (2005). *SCL-90: Handleiding bij een multidimensionale psychopathologie-indicator* [SCL-90: Manual for a multidimensional indicator of psychopathology]. Pearson.

Asparouhov, T., & Muthen, B. (2013). *Auxiliary variables in mixture modeling: 3-step approaches using Mplus*. https://www.statmodel.com/examples/webnotes/webnote15.pdf

Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research*, *1*(4), 287–310. https://doi.org/10.1007/BF01663995

Barnett, M. A. (2008). Economic disadvantage in complex family systems: Expansion of family stress models. *Clinical Child and Family Psychology Review*, *11*(3), 145–161. https://doi.org/10.1007/s10567-008-0034-z

Bauer, D. J., & Hussong, A. M. (2009). Psychometric approaches for developing commensurate measures across independent studies: Traditional and new models. *Psychological Methods*, *14*(2), 101–125. https://doi.org/10.1037/a0015583

Baumann, N., Anderson, P. J., Johnson, S., Marlow, N., Wolke, D., & Jaekel, J. (2024). Harmonisation of assessments of attention, social, emotional, and behaviour problems using the Child Behavior Checklist and the Strengths and Difficulties Questionnaire. *International Journal of Methods in Psychiatric Research*, *33*(1), Article e2001. https://doi.org/10.1002/mpr.2001

Baumel, A., Mathur, N., Pawar, A., & Muench, F. (2021). Psychosocial interventions for children with externalized behavior problems: An updated meta-analysis of moderator effects. *Journal of Child and Family Studies*, *30*(1), 65–86. https://doi.org/10.1007/s10826-020-01863-6

Bausback, K. B., & Bunge, E. L. (2021). Meta-analysis of parent training programs utilizing behavior intervention technologies. *Social Sciences*, *10*(10), Article 367. https://doi.org/10.3390/socsci10100367

Baydar, N., Reid, M. J., & Webster-Stratton, C. (2003). The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for Head Start mothers. *Child Development*, *74*(5), 1433–1453. https://doi.org/10.1111/1467-8624.00616

Beauchaine, T. P., & McNulty, T. (2013). Comorbidities and continuities as ontogenic processes: Toward a developmental spectrum model of externalizing psychopathology. *Development and Psychopathology*, *25*(4 pt 2), 1505–1528. https://doi.org/10.1017/S0954579413000746

Beauchaine, T. P., Webster-Stratton, C., & Reid, M. J. (2005). Mediators, moderators, and predictors of 1-year outcomes among children treated for early-onset conduct problems: A latent growth curve analysis. *Journal of Consulting and Clinical Psychology*, *73*(3), 371–388. https://doi.org/10.1037/0022-006X.73.3.371

Beck, A. T., & Beamesderfer, A. (1974). Assessment of depression: The depression inventory. *Modern Problems of Pharmacopsychiatry*, *7*, 151–169. https://doi.org/10.1159/000395074

Beelmann, A., Arnold, L. S., & Hercher, J. (2023). Parent training programs for preventing and treating antisocial behavior in children and adolescents: A comprehensive meta-analysis of international studies. *Aggression and Violent Behavior*, *68*, Article 101798. https://doi.org/10.1016/j.avb.2022.101798

Boggs, S. R., Eyberg, S. M., Edwards, D. L., Rayfield, A., Jacobs, J., Bagner, D., & Hood, K. K. (2004). Outcomes of parent-child interaction therapy: A comparison of treatment completers and study dropouts one to three years later. *Child & Family Behavior Therapy*, *26*(4), 1–22. https://doi.org/10.1300/J019v26n04_01

Bolhuis, K., Lubke, G. H., van der Ende, J., Bartels, M., van Beijsterveldt, C. E. M., Lichtenstein, P., Larsson, H., Jaddoe, V. W. V., Kushner, S. A., Verhulst, F. C., Boomsma, D. I., & Tiemeier, H. (2017). Disentangling heterogeneity of childhood disruptive behavior problems into dimensions and subgroups. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(8), 678–686. https://doi.org/10.1016/j.jaac.2017.05.019

Brown, L. D., Goslin, M. C., & Feinberg, M. E. (2012). Relating engagement to outcomes in prevention: The case of a parenting program for couples. *American Journal of Community Psychology*, *50*(1–2), 17–25. https://doi.org/10.1007/s10464-011-9467-5

Buchanan-Pascall, S., Gray, K. M., Gordon, M., & Melvin, G. A. (2018). Systematic review and meta-analysis of parent group interventions for primary school children aged 4–12 years with externalizing and/or internalizing problems. *Child Psychiatry and Human Development*, *49*(2), 244–267. https://doi.org/10.1007/s10578-017-0745-9

Bull, T., & Mittelmark, M. B. (2009). Work life and mental wellbeing of single and non-single working mothers in Scandinavia. *Scandinavian Journal of Public Health*, *37*(6), 562–568. https://doi.org/10.1177/1403494809340494

Carbonneau, R., Vitaro, F., Brendgen, M., Boivin, M., & Tremblay, R. E. (2022). Early risk factors associated with preschool developmental patterns of single and co-occurrent disruptive behaviors in a population sample. *Developmental Psychology*, *58*(3), 438–452. https://doi.org/10.1037/dev0001295

Chacko, A., Jensen, S. A., Lowry, L. S., Cornwell, M., Chimklis, A., Chan, E., Lee, D., & Pulgarin, B. (2016). Engagement in behavioral parent training: Review of the literature and implications for practice. *Clinical Child and Family Psychology Review*, *19*(3), 204–215. https://doi.org/10.1007/s10567-016-0205-2

Colalillo, S., & Johnston, C. (2016). Parenting cognition and affective outcomes following parent management training: A systematic review. *Clinical Child and Family Psychology Review*, *19*(3), 216–235. https://doi.org/10.1007/s10567-016-0208-z

Cowan, P. A., Powell, D., & Cowan, C. P. (1998). Parenting interventions: A family systems perspective. In W. Damon, I. E. Sigel, & K. A. Renninger (Eds.), *Handbook of child psychology: Child psychology in practice* (pp. 3–72). Wiley.

Dale, C., Parent, J., Forehand, R., DiMarzio, K., Sonuga-Barke, E., Long, N., & Abikoff, H. B. (2022). Behavioral parent training for preschool ADHD: Family-centered profiles predict changes in parenting and child outcomes. *Journal of Clinical Child and Adolescent Psychology*, *51*(5), 726–739. https://doi.org/10.1080/15374416.2020.1867987

Daley, D., Van Der Oord, S., Ferrin, M., Cortese, S., Danckaerts, M., Doepfner, M., Van den Hoofdakker, B. J., Coghill, D., Thompson, M., Asherson, P., Banaschewski, T., Brandeis, D., Buitelaar, J., Dittmann, R. W., Hollis, C., Holtmann, M., Konofal, E., Lecendreux, M., Rothenberger, A., … Sonuga-Barke, E. J. (2018). Practitioner review: Current best practice in the use of parent training and other behavioural interventions in the treatment of children and adolescents with attention deficit hyperactivity disorder. *Journal of Child Psychology and Psychiatry*, *59*(9), 932–947. https://doi.org/10.1111/jcpp.12825

Dedousis-Wallace, A., Drysdale, S. A., McAloon, J., & Ollendick, T. H. (2021). Parental and familial predictors and moderators of parent management treatment programs for conduct problems in youth. *Clinical Child and Family Psychology Review*, *24*(1), 92–119. https://doi.org/10.1007/s10567-020-00330-4

Dere, J., Watters, C. A., Yu, S. C. M., Bagby, R. M., Ryder, A. G., & Harkness, K. L. (2015). Cross-Cultural examination of measurement invariance of the Beck Depression Inventory–II. *Psychological Assessment*, *27*(1), 68. https://doi.org/10.1037/pas0000026

Dowdney, L., Skuse, D., Rutter, M., Quinton, D., & Mrazek, D. (1985). The nature and qualities of parenting provided by women raised in institutions. *Journal of Child Psychology and Psychiatry*, *26*(4), 599–625. https://doi.org/10.1111/j.1469-7610.1985.tb01644.x

Duppong-Hurley, K., Hoffman, S., Barnes, B., & Oats, R. (2016). Perspectives on engagement barriers and alternative delivery formats from non-completers of community-run parenting programs. *Journal of Child and Family Studies*, *25*(2), 545–552. https://doi.org/10.1007/s10826-015-0253-0

Eyberg, S. M., & Pincus, D. (1999). *Eyberg child behavior inventory and Sutter-Eyberg student behavior inventory-revised: Professional manual*. Psychological Assessment Resources.

Feldman, M. A., & Werner, S. E. (2002). Collateral effects of behavioral parent training on families of children with developmental disabilities and behavior disorders. *Behavioral Interventions*, *17*(2), 75–83. https://doi.org/10.1002/bin.111

Ferdinand, R. F. (2008). Validity of the CBCL/YSR *DSM-IV* scales anxiety problems and affective problems. *Journal of Anxiety Disorders*, *22*(1), 126–134. https://doi.org/10.1016/j.janxdis.2007.01.008

Ferguson, S. L. G., Moore, E. W., & Hull, D. M. (2020). Finding latent groups in observed data: A primer on latent profile analysis in Mplus for applied researchers. *International Journal of Behavioral Development*, *44*(5), 458–468. https://doi.org/10.1177/0165025419881721

Foley, S., Ronchi, L., Lecce, S., Feng, X., Chan, M. H. M., & Hughes, C. (2023). Cross-cultural equivalence of parental ratings of child difficulties during the pandemic: Findings from a six-site study. *International Journal of Methods in Psychiatric Research*, *32*(1), Article e1933. https://doi.org/10.1002/mpr.1933

Forehand, R., Lafko, N., Parent, J., & Burt, K. B. (2014). Is parenting the mediator of change in behavioral parent training for externalizing problems of youth? *Clinical Psychology Review*, *34*(8), 608–619. https://doi.org/10.1016/j.cpr.2014.10.001

Gach, E. J., Ip, K. I., Sameroff, A. J., & Olson, S. L. (2018). Early cumulative risk predicts externalizing behavior at age 10: The mediating role of adverse parenting. *Journal of the Division of Family Psychology*, *32*(1), 92–102. https://doi.org/10.1037/fam0000360

Gardner, F., Leijten, P., Melendez-Torres, G. J., Landau, S., Harris, V., Mann, J., Beecham, J., Hutchings, J., & Scott, S. (2019). The earlier the better? Individual participant data and traditional meta-analysis of age effects of parenting interventions. *Child Development*, *90*(1), 7–19. https://doi.org/10.1111/cdev.13138

Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., Piccinelli, M., Gureje, O., & Rutter, C. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, *27*(1), 191–197. https://doi.org/10.1017/S0033291796004242

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, *38*(5), 581–586. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x

Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2003). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *International Review of Psychiatry*, *15*(1–2), 166–172. https://doi.org/10.1080/0954026021000046128

Goodman, S. H., Simon, H. F. M., Shamblaw, A. L., & Kim, C. Y. (2020). Parenting as a mediator of associations between depression in mothers and children's functioning: A systematic review and meta-analysis. *Clinical Child and Family Psychology Review*, *23*(4), 427–460. https://doi.org/10.1007/s10567-020-00322-4

Griest, D. L., & Forehand, R. (1983). How can I get any parent training done with all these other problems going on? The role of family variables in child behavioral therapy. *Child & Family Behavior Therapy*, *4*(1), 73–80. https://doi.org/10.1300/J019v04n01_08

Groenman, A. P., Hornstra, R., Hoekstra, P. J., Steenhuis, L., Aghebati, A., Boyer, B. E., Buitelaar, J. K., Chronis-Tuscano, A., Daley, D., Dehkordian, P., Dvorsky, M., Franke, N., DuPaul, G. J., Gershy, N., Harvey, E., Hennig, T., Herbert, S., Langberg, J., Mautone, J. A., … van den Hoofdakker, B. J. (2022). An individual participant data meta-analysis: Behavioral treatments for children and adolescents with attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, *61*(2), 144–158. https://doi.org/10.1016/j.jaac.2021.02.024

Gross, T. J., Mason, W. A., Parra, G., Oats, R., Ringle, J., & Haggerty, K. P. (2015). Adherence and dosage contributions to parenting program quality. *Journal of the Society for Social Work and Research*, *6*(4), 467–489. https://doi.org/10.1086/684108

Gutman, L. M., Joshi, H., & Schoon, I. (2019). Developmental trajectories of conduct problems and cumulative risk from early childhood to adolescence. *Journal of Youth and Adolescence*, *48*(2), 181–198. https://doi.org/10.1007/s10964-018-0971-x

Herbers, J. E., Garcia, E. B., & Obradović, J. (2017). Parenting assessed by observation versus parent-report: Moderation by parent distress and family socioeconomic status. *Journal of Child and Family Studies*, *26*(12), 3339–3350. https://doi.org/10.1007/s10826-017-0848-8

Hill, R. (1958). Generic features of families under stress. *Social Casework*, *39*(2–3), 139–150. https://doi.org/10.1177/104438945803900 2-318

Holland, P. W., & Dorans, N. J. (2006). Linking and equating. In R. L. Brennan (Ed.), *Educational measurement* (4th ed., pp. 187–220). American Council on Education/Praeger.

Howard, M. C., & Hoffman, M. E. (2018). Variable-centered, person-centered, and person-specific approaches. *Organizational Research Methods*, *21*(4), 846–876. https://doi.org/10.1177/1094428117744021

Jacobson, N. S., Roberts, L. J., Berns, S. B., & McGlinchey, J. B. (1999). Methods for defining and determining the clinical significance of treatment effects: Description, application, and alternatives. *Journal of Consulting and Clinical Psychology*, *67*(3), 300–307. https://doi.org/10.1037/0022-006X.67.3.300

Kazdin, A. E., & McWhinney, E. (2018). Therapeutic alliance, perceived treatment barriers, and therapeutic change in the treatment of children with conduct problems. *Journal of Child and Family Studies*, *27*(1), 240–252. https://doi.org/10.1007/s10826-017-0869-3

Kjøbli, J., Naerde, A., Bjørnebekk, G., & Askeland, E. (2014). Maternal mental distress influences child outcomes in brief parent training. *Child and Adolescent Mental Health*, *19*(3), 171–177. https://doi.org/10.1111/camh.12028

Klahr, A. M., & Burt, S. A. (2014). Evaluation of the known behavioral heterogeneity in conduct disorder to improve its assessment and treatment. *Journal of Child Psychology and Psychiatry*, *55*(12), 1300–1310. https://doi.org/10.1111/jcpp.12268

Koeter, M. W. (1992). Validity of the GHQ and SCL anxiety and depression scales: A comparative study. *Journal of Affective Disorders*, *24*(4), 271–279. https://doi.org/10.1016/0165-0327(92)90112-J

Kreppner, K., & Lerner, M. (1989). Family systems and life-span development: Issues and perspectives. In K. Kreppner & M. Lerner (Eds.), *Family systems and life-span development* (pp. 1–13). Lawrence Erlbaum.

Lane, C., Hogg, E., Karwatowska, L. A., French, L., Ranieri, V. F., Jesnick, L. G. D., Roberts, C., Scott, S., Senior, R., Skinner, G. C., & Kennedy, E. M. M. (2023). Personalised interventions for subgroups of children with conduct problems. *Cochrane Database of Systematic Reviews*, *2023*(4), Article CD012746. https://doi.org/10.1002/14651858.CD012746.pub2

Lanza, S. T., & Rhoades, B. L. (2013). Latent class analysis: An alternative perspective on subgroup analysis in prevention and treatment. *Prevention Science*, *14*(2), 157–168. https://doi.org/10.1007/s11121-011-0201-1

Larsson, B., Fossum, S., Clifford, G., Drugli, M. B., Handegård, B. H., & Mørch, W. T. (2009). Treatment of oppositional defiant and conduct problems in young Norwegian children: Results of a randomized controlled trial. *European Child & Adolescent Psychiatry*, *18*, 42–52. https://doi.org/10.1007/s00787-008-0702-z

Lasa, L., Ayuso-Mateos, J. L., Vázquez-Barquero, J. L., Díez-Manrique, F. J., & Dowrick, C. F. (2000). The use of the Beck Depression Inventory to screen for depression in the general population: A preliminary analysis. *Journal of Affective Disorders*, *57*(1–3), 261–265. https://doi.org/10.1016/S0165-0327(99)00088-9

Leijten, P., Gardner, F., Landau, S., Harris, V., Mann, J., Hutchings, J., Beecham, J., Bonin, E.-M., & Scott, S. (2018). Research review: Harnessing the power of individual participant data in a meta-analysis of the benefits and harms of the Incredible Years parenting program. *Journal of Child Psychology and Psychiatry*, *59*(2), 99–109. https://doi.org/10.1111/jcpp.12781

Leijten, P., Gardner, F., Melendez-Torres, G. J., van Aar, J., Hutchings, J., Schulz, S., Knerr, W., & Overbeek, G. (2019). Meta-analyses: Key parenting program components for disruptive child behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*, *58*(2), 180–190. https://doi.org/10.1016/j.jaac.2018.07.900

Leijten, P., Raaijmakers, M., Wijngaards, L., Matthys, W., Menting, A., Hemink-van Putten, M., & Orobio de Castro, B. (2018). Understanding who benefits from parenting interventions for children's conduct problems: An integrative data analysis. *Prevention Science*, *19*(4), 579–588. https://doi.org/10.1007/s11121-018-0864-y

Leijten, P., Raaijmakers, M. A., Orobio de Castro, B., van den Ban, E., & Matthys, W. (2017). Effectiveness of the incredible years parenting program for families with socioeconomically disadvantaged and ethnic minority backgrounds. *Journal of Clinical Child & Adolescent Psychology*, *46*(1), 59–73. https://doi.org/10.1080/15374416.2015.1038823

Leijten, P., Scott, S., Landau, S., Harris, V., Mann, J., Hutchings, J., Beecham, J., & Gardner, F. (2020). Individual participant data meta-analysis: Impact of conduct problem severity, comorbid attention-deficit/hyperactivity disorder and emotional problems, and maternal depression on parenting program effects. *Journal of the American Academy of Child & Adolescent Psychiatry*, *59*(8), 933–943. https://doi.org/10.1016/j.jaac.2020.01.023

Liang, L. A., Berger, U., & Brand, C. (2019). Psychosocial factors associated with symptoms of depression, anxiety and stress among single mothers with young children: A population-based study. *Journal of Affective Disorders*, *242*, 255–264. https://doi.org/10.1016/j.jad.2018.08.013

Lundin, A., Hallgren, M., & Forsell, Y. (2015). The validity of the symptom checklist depression and anxiety subscales: A general population study in Sweden. *Journal of Affective Disorders*, *183*, 247–252. https://doi.org/10.1016/j.jad.2015.05.024

Malcolm-Smith, S., Lake, M. T., Krwece, A., Du Plooy, C. P., Hoffman, N., Donald, K. A., Zar, H. J., & Stein, D. J. (2023). Externalizing behavior in preschool children in a South African birth cohort: Predictive pathways in a high-risk context. *Development and Psychopathology*, *35*(2), 982–999. https://doi.org/10.1017/S095457942200027X

Masarik, A. S., & Conger, R. D. (2017). Stress and child development: A review of the family stress model. *Current Opinion in Psychology*, *13*, 85–90. https://doi.org/10.1016/j.copsyc.2016.05.008

Maurice-Stam, H., Haverman, L., Splinter, A., van Oers, H. A., Schepers, S. A., & Grootenhuis, M. A. (2018). Dutch norms for the Strengths and Difficulties Questionnaire (SDQ)—Parent form for children aged 2–18 years. *Health and Quality of Life Outcomes*, *16*(1), Article 123. https://doi.org/10.1186/s12955-018-0948-1

McElroy, E., Villadsen, A., Patalay, P., Goodman, A., Richards, M., Northstone, K., Fearon, P., Tibber, M., Gondek, D., & Ploubidis, G. B. (2020). *Harmonisation and measurement properties of mental health measures in six British cohorts*. CLOSER. https://closer.ac.uk/wp-content/uploads/210715-Harmonisation-measurement-properties-mental-health-measures-british-cohorts.pdf

McGilloway, S., Mhaille, G. N., Bywater, T., Furlong, M., Leckey, Y., Kelly, P., Comiskey, C., & Donnelly, M. (2012). A parenting intervention for childhood behavioral problems: A randomized controlled trial in disadvantaged community-based settings. *Journal of Consulting and Clinical Psychology*, *80*(1), 116–127. https://doi.org/10.1037/a0026304

McKay, K., Kennedy, E., Senior, R., Scott, S., Hill, J., Doolan, M., Woolgar, M., Peeren, S., & Young, B. (2020). Informing the personalisation of interventions for parents of children with conduct problems: A qualitative study. *BMC Psychiatry*, *20*(1), Article 513. https://doi.org/10.1186/s12888-020-02917-1

McKay, K., Kennedy, E., & Young, B. (2021). "Sometimes I think my frustration is the real issue": A qualitative study of parents' experiences of transformation after a parenting programme. *PLOS ONE*, *16*(10), Article e0258528. https://doi.org/10.1371/journal.pone.0258528

McMahon, R. J., Goulter, N., & Frick, P. J. (2021). Moderators of psychosocial intervention response for children and adolescents with conduct problems. *Journal of Clinical Child and Adolescent Psychology*, *50*(4), 525–533. https://doi.org/10.1080/15374416.2021.1894566

Mingebach, T., Kamp-Becker, I., Christiansen, H., & Weber, L. (2018). Meta-meta-analysis on the effectiveness of parent-based interventions for the treatment of child externalizing behavior problems. *PLOS ONE*, *13*(9), Article e0202855. https://doi.org/10.1371/journal.pone.0202855

Minuchin, P. (1988). Relationships within the family: A systems perspective on development. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 7–26). Oxford University Press.

Mullola, S., Brooks-Gunn, J., Elovainio, M., Hakulinen, C., Schneper, L. M., & Notterman, D. A. (2021). Early childhood psychosocial family risks and cumulative dopaminergic sensitizing score: Links to behavior problems in U.S. 9-year-olds. *Journal of Affective Disorders*, *280*(Pt. A), 432–441. https://doi.org/10.1016/j.jad.2020.11.026

Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (7th ed.).

Nuevo, R., Dunn, G., Dowrick, C., Vázquez-Barquero, J. L., Casey, P., Dalgard, O. S., Lehtinen, V., & Ayuso-Mateos, J. L. (2009). Cross-cultural equivalence of the Beck Depression Inventory: A five-country analysis from the ODIN study. *Journal of Affective Disorders*, *114*(1–3), 156–162. https://doi.org/10.1016/j.jad.2008.06.021

Patterson, G. R., & Chamberlain, P. (1994). A functional analysis of resistance during parent training therapy. *Clinical Psychology: Science and Practice*, *1*(1), 53. https://doi.org/10.1111/j.1468-2850.1994.tb00006.x

Pelham, W. E., III, Dishion, T. J., Tein, J.-Y., Shaw, D. S., & Wilson, M. N. (2017). What doesn't work for whom? Exploring heterogeneity in responsiveness to the family check-up in early childhood using a mixture model approach. *Prevention Science*, *18*(8), 911–922. https://doi.org/10.1007/s11121-017-0805-1

Pereira, M., Negrão, M., Soares, I., & Mesman, J. (2014). Decreasing harsh discipline in mothers at risk for maltreatment: A randomized control trial. *Infant Mental Health Journal*, *35*(6), 604–613. https://doi.org/10.1002/imhj.21464

Perlstein, S., Fair, M., Hong, E., & Waller, R. (2023). Treatment of childhood disruptive behavior disorders and callous-unemotional traits: A systematic review and two multilevel meta-analyses. *Journal of Child Psychology and Psychiatry*, *64*(9), 1372–1387. https://doi.org/10.1111/jcpp.13774

Petersen, I. T., Bates, J. E., Dodge, K. A., Lansford, J. E., & Pettit, G. S. (2015). Describing and predicting developmental profiles of externalizing problems from childhood to adulthood. *Development and Psychopathology*, *27*(3), 791–818. https://doi.org/10.1017/S0954579414000789

Piquero, A. R., Jennings, W. G., Diamond, B., Farrington, D. P., Tremblay, R. E., Welsh, B. C., & Gonzalez, J. M. R. (2016). A meta-analysis update on the effects of early family/parent training programs on antisocial behavior and delinquency. *Journal of Experimental Criminology*, *12*(2), 229–248. https://doi.org/10.1007/s11292-016-9256-0

Posthumus, J. A., Raaijmakers, M. A. J., Maassen, G. H. van Engeland, H., & Matthys, W. (2012). Sustained Effects of Incredible Years as a Preventive Intervention in Preschool Children with Conduct Problems. *Journal of Abnormal Child Psychology*, *40*, 487–450. https://doi.org/10.1007/s10802-011-9580-9

Reid, M. J., Webster-Stratton, C., & Baydar, N. (2004). Halting the development of conduct problems in head start children: The effects of parent training. *Journal of Clinical Child and Adolescent Psychology*, *33*(2), 279–291. https://doi.org/10.1207/s15374424jccp3302_10

Riglin, L., Agha, S. S., Eyre, O., Bevan Jones, R., Wootton, R. E., Thapar, A. K., Collishaw, S., Stergiakouli, E., Langley, K., & Thapar, A. (2021). Investigating the validity of the Strengths and Difficulties Questionnaire to assess ADHD in young adulthood. *Psychiatry Research*, *301*, Article 113984. https://doi.org/10.1016/j.psychres.2021.113984

Rosa-Justicia, M., Saam, M. C., Flamarique, I., Borràs, R., Naaijen, J., Dietrich, A., Hoekstra, P. J., Banaschewski, T., Aggensteiner, P., Craig, M. C., Sethi, A., Santosh, P., Sagar-Ouriaghli, I., Arango, C., Penzol, M. J., Brandeis, D., Werhahn, J. E., Glennon, J. C., Franke, B., … Castro-Fornieles, J. (2022). Subgrouping children and adolescents with disruptive behaviors: Symptom profiles and the role of callous-unemotional traits. *European Child & Adolescent Psychiatry*, *31*(1), 51–66. https://doi.org/10.1007/s00787-020-01662-w

Rostad, W. L., Moreland, A. D., Valle, L. A., & Chaffin, M. J. (2018). Barriers to participation in parenting programs: The relationship between parenting stress, perceived barriers, and program completion. *Journal of Child and Family Studies*, *27*(4), 1264–1274. https://doi.org/10.1007/s10826-017-0963-6

Schmeck, K., Poustka, F., Döpfner, M., Plück, J., Berner, W., Lehmkuhl, G., Fegert, J. M., Lenz, K., Huss, M., & Lehmkuhl, U. (2001). Discriminant validity of the child behaviour checklist CBCL-4/18 in German samples. *European Child & Adolescent Psychiatry*, *10*(4), 240–247. https://doi.org/10.1007/s007870170013

Scott, S., & Dadds, M. R. (2009). Practitioner review: When parent training doesn't work: Theory-driven clinical strategies. *Journal of Child Psychology and Psychiatry*, *50*(12), 1441–1450. https://doi.org/10.1111/j.1469-7610.2009.02161.x

Scott, S., & O'Connor, T. G. (2012). An experimental test of differential susceptibility to parenting among emotionally-dysregulated children in a randomized controlled trial for oppositional behavior. *Journal of Child Psychology and Psychiatry*, *53*(11), 1184–1193. https://doi.org/10.1111/j.1469-7610.2012.02586.x

Scott, S., O'Connor, T. G., Futh, A., Matias, C., Price, J., & Doolan, M. (2010). Impact of a parenting program in a high-risk, multi-ethnic community: The PALS trial. *Journal of Child Psychology and Psychiatry*, *51*(12), 1331–1341. https://doi.org/10.1111/j.1469-7610.2010.02302.x

Scott, S., Sylva, K., Doolan, M., Price, J., Jacobs, B., Crook, C., & Landau, S. (2010). Randomised controlled trial of parent groups for child antisocial behaviour targeting multiple risk factors: The SPOKES project. *Journal of Child Psychology and Psychiatry*, *51*(1), 48–57. https://doi.org/10.1111/j.1469-7610.2009.02127.x

Seabra-Santos, M. J., Gaspar, M. F., Azevedo, A. F., Homem, T. C., Guerra, J., Martins, V., Leitão, S., Pimentel, M., Almeida, M., & Moura-Ramos, M. (2016). Incredible Years parent training: What changes, for whom, how, for how long? *Journal of Applied Developmental Psychology*, *44*, 93–104. https://doi.org/10.1016/j.appdev.2016.04.004

Smith, J. D., Berkel, C., Hails, K. A., Dishion, T. J., Shaw, D. S., & Wilson, M. N. (2018). Predictors of participation in the family check-up program: A randomized trial of yearly services from age 2 to 10 years. *Prevention Science*, *19*(5), 652–662. https://doi.org/10.1007/s11121-016-0679-7

Stevanovic, D., Jafari, P., Knez, R., Franic, T., Atilola, O., Davidovic, N., Bagheri, Z., & Lakic, A. (2017). Can we really use available scales for child and adolescent psychopathology across cultures? A systematic review of cross-cultural measurement invariance data. *Transcultural Psychiatry*, *54*(1), 125–152. https://doi.org/10.1177/1363461516689215

Tan, T. X., Gelley, C. D., & Dedrick, R. F. (2015). Non-child-related family stress, parenting styles, and behavior problems in school-age girls adopted from China. *Journal of Child and Family Studies*, *24*(10), 2881–2891. https://doi.org/10.1007/s10826-014-0092-4

Theunissen, M. H. C., de Wolff, M. S., & Reijneveld, S. A. (2019). The Strengths and Difficulties Questionnaire self-report: A valid instrument for the identification of emotional and behavioral problems. *Academic Pediatrics*, *19*(4), 471–476. https://doi.org/10.1016/j.acap.2018.12.008

UNESCO Institute of Statistics. (2011). *International Standard Classification of Education 2011*. https://www.uis.unesco.org

Van Aar, J., Leijten, P., de Castro, B. O., Weeland, J., Matthys, W., Chhangur, R., & Overbeek, G. (2019). Families who benefit and families who do not: Integrating person-and variable-centered analyses of parenting intervention responses. *Journal of the American Academy of Child & Adolescent Psychiatry*, *58*(10), 993–1003. https://doi.org/10.1016/j.jaac.2019.02.004

Vugteveen, J., de Bildt, A., Theunissen, M., Reijneveld, S. A., & Timmerman, M. (2021). Validity aspects of the Strengths and Difficulties Questionnaire (SDQ) adolescent self-report and parent-report versions among Dutch adolescents. *Assessment*, *28*(2), 601–616. https://doi.org/10.1177/1073191119858416

Weber, L., Kamp-Becker, I., Christiansen, H., & Mingebach, T. (2019). Treatment of child externalizing behavior problems: A comprehensive review and meta-meta-analysis on effects of parent-based interventions on parental characteristics. *European Child & Adolescent Psychiatry*, *28*(8), 1025–1036. https://doi.org/10.1007/s00787-018-1175-3

Webster-Stratton, C. (2001). *Parenting Practices Interview* [Unpublished assessment instrument].

Webster-Stratton, C. (2008). The Incredible Years: Parents, teachers, and children training series. *Residential Treatment for Children & Youth*, *18*(3), 31–45. https://doi.org/10.1300/J007v18n03_04

Webster-Stratton, C. (2012). *Collaborating with parents to reduce children's behavior problems: A book for therapists using the Incredible Years programs.* Incredible Years.

Webster-Stratton, C. (2015). The Incredible Years series: A developmental approach. In M. VanRyzin, K. Kumpfer, G. Fosco, & M. Greenburg (Eds.), *Family-based prevention programs for children and adolescents: Theory, research, and large-scale dissemination* (pp. 54–79). Psychology Press.

Weeland, J., Chhangur, R. R., van der Giessen, D., Matthys, W., de Castro, B. O., & Overbeek, G. (2017). Intervention effectiveness of the Incredible Years: New insights into sociodemographic and intervention-based moderators. *Behavior Therapy*, *48*(1), 1–18. https://doi.org/10.1016/j.beth.2016.08.002

Weeland, J., Helmerhorst, K. O. W., & Lucassen, N. (2021). Understanding differential effectiveness of behavioral parent training from a family systems perspective: Families are greater than "some of their parts". *Journal of Family Theory & Review*, *13*(1), 34–57. https://doi.org/10.1111/jftr.12408

Weeland, J., Leijten, P., Orobio de Castro, B., Menting, A., Overbeek, G., Raaijmakers, M., Jongerling, J., & Matthys, W. (2023). Exploring parenting profiles to understand who benefits from the Incredible Years parenting program. *Prevention Science*, *24*(2), 259–270. https://doi.org/10.1007/s11121-022-01364-6

Weeland, J., van Aar, J., & Overbeek, G. (2018). Dutch norms for the Eyberg Child Behavior Inventory: Comparisons with other Western countries. *Journal of Psychopathology and Behavioral Assessment*, *40*(2), 224–234. https://doi.org/10.1007/s10862-017-9639-1

Weidman, A. C., Steckler, C. M., & Tracy, J. L. (2017). The jingle and jangle of emotion assessment: Imprecise measurement, casual scale usage, and conceptual fuzziness in emotion research. *Emotion*, *17*(2), 267–295. https://doi.org/10.1037/emo0000226

Received October 17, 2023
Revision received September 12, 2024
Accepted September 12, 2024 ■