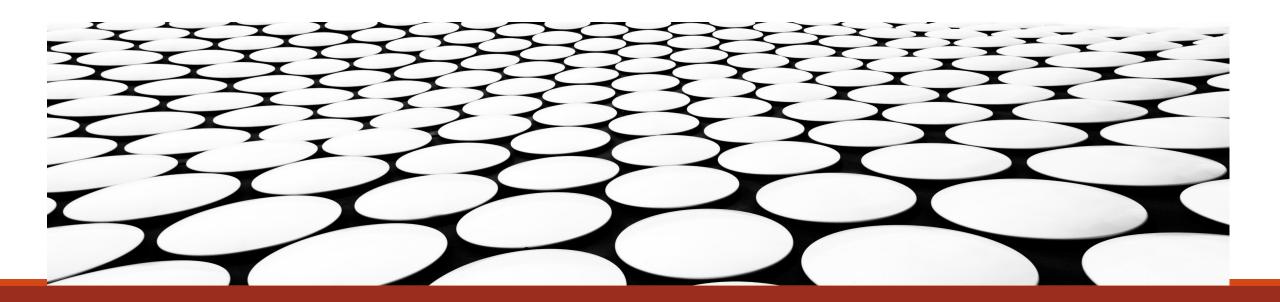
# Incredible Years Autism – Parent and Teacher Training Programme External Evaluation

A/Prof. Laurie McLay, Dr Cara Swit, Prof. Neville Blampied 2021



#### Incredible Years Autism Programmes

- Series of parent and teacher training programmes developed by Dr Carolyn Webster-Stratton
- Underpinned by child development, attachment, and social learning theories
- Parents and teachers of 2-5 year old children on the autism spectrum
- Equips adults to provide a supportive and enabling environment, across settings
- Empirical support internationally, across demographic groups

### Delivery of Programmes in Aotearoa New Zealand

Delivered face-to-face by two trained and accredited facilitators

IYA-P programme – 12-14 weekly sessions

IYA-T programme – 6 sessions, fortnightly

- Delivered across eight regions by two accredited leaders
- Delivered in accordance with guidelines and standards approved by IY organisation

#### **Evaluation Aims**

Examine the extent to which the IYA programmes contributed to:

- 1) increased engagement, emotional regulation and communication skills of young children demonstrating behaviours associated with autism (child outcomes);
- 2) increased wellbeing and coping skills of caregivers enabling them to better support their child (caregiver outcomes);
- 3) increased teacher capability to help children demonstrating behaviours associated with autism (teacher outcomes); and
- 4) longer term and unintended benefits for those involved and the wider communities (additional benefits).

### **Evaluation Team**



A/Prof. Laurie McLay



**Prof. Neville Blampied** 



A/Prof. Dean Sutherland





#### Approach to Evaluation

- Combination of quantitative measures (questionnaires) and qualitative information (interviews)
- Evaluation team collected data at ex-post phase (pre/post data collected by facilitators)
- Evaluation across phases, completed for Cohorts 1 and 2
- Cohort 3 COVID-19 disruptions; IYA-T pre- and post-data only

#### **Evaluation Assessments**

Table 1. A summary of the assessments administered during the pre-, post- and ex-post evaluation phases, as completed by participants in the IYA-P and IYA-T programmes.

	Pre-participation	Post-participation	Ex-post participation
IYA-P measures	YC-PEM	YC-PEM	YC-PEM
	APSI	APSI	APSI
		PSQ-P	*DASS-21
			SDQ-P
			PedsQL
			IYPSQ
IYA-T measures	IYTSQ	IYTSQ	IYTSQ
		PSQ-P	SDQ-T
			PedsQL

<sup>\*</sup> The DASS-21 was not administered for IYA-P Cohort 2 participants due to the strong correlation with APSI data demonstrated during the Cohort 1 evaluation.

#### Participant Interviews

- Designed to supplement quantitative data
- Focus areas:
  - Acquisition of new strategies that support children's communication, emotion regulation and engagement
  - Sharing of knowledge and strategies
  - Application to other tamariki (teachers only)
  - Sense of competence and confidence

### Questions to Identify Additional Benefit

- Home/school communication and relationship
- Changes in participation, inclusion and attendance at centre/school
- Long-term benefits, 6 months on
- Unexpected outcomes

Table 2. The number of caregiver respondents at pre-, post-, and ex-post training phases, according to participation rates, ethnicity, and region.

		icipation ses (N)		rticipation nses (N)	Ex-post pa	articipation nses (N)		s (ex-post y; N)
	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2
Participation in IYA- P (14 sessions)								
12-14 sessions	40	30	39	27	16	14	13	7
9-11 sessions	10	15	9	12	2	6	1	5
5-8 sessions	5	7	2	3	2	1	0	0
1- 4 sessions	3	6	0	0	0	0	0	0
No attendance but completed pre- questionnaires	2	3	0	0	0	0	0	0
Ethnicity								
NZ European	25	32	22	26	8	13	6	9
Māori	15	17	13	10	4	4	2	1
Pacific Peoples	5	2	5	0	3	0	1	0
Asian	4	7	2	5	1	3	0	2
Middle Eastern, Latin American/African	1	2	1	1	0	0	0	0
Other/no option selected	10	0	7	0	4	1	5	0
Region								
Bay of Plenty	16	25	16	21	7	9	5	5
Nelson	7	0	4	0	1	0	1	0
Wellington	15	20	13	15	4	8	2	6
Canterbury	7	0	5	0	2	0	2	0
Hawke's Bay	9	0	7	0	4	0	3	0
Otago/Southland	5	0	4	0	1	0	1	0
Auckland	1	16	1	6	1	4	0	1
Total	60	61	50	42	20	21	14	12

#### **IYA-P Participants**

- Majority attended all sessions (12-14)
- Majority of participants were NZ European
- Majority of responses came from Bay of Plenty and Wellington region
- High rates of attrition across phases

Table 3. The number of Cohort 1 and 2 teacher respondents at pre-, post-, and ex-post training phases, according to participation rates, ethnicity, and region.

		ticipation onses		ticipation onses	Ex-post re	esponses		views st only)
	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort
Participation in IYA-T programme (six sessions)								
5-6 sessions	70	88	50	74	32	26	17	22
3-4 sessions	20	8	16	1	12	0	8	0
1-2 sessions	4	0	4	0	3	0	2	0
No attendance but completed pre- questionnaires	1	0	0	0	0	0	0	0
Ethnicity								
NZ European	81	76	60	59	42	21	24	20
Māori	4	11	3	7	1	3	1	2
Pacific Peoples	1		1		1		1	0
Asian	1	2	1	2	0	0	0	0
Middle Eastern, Latin American/African	1		1		0		0	0
Other or no selection	7	7	4	7	3	2	1	0
Region								
Bay of Plenty	9	16	7	4	4	2	2	4
Nelson/Marlborough/ West Coast	14	5	11	4	9	1	6	2
Wellington	24	8	12	8	11	2	4	2
Canterbury	23	45	20	43	10	13	6	9
Hawke's Bay	6	14	3	8	4	4	2	2
Taranaki/Manawatu/ Whanganui	19	8	17	8	10	4	7	3
Total N	95	96	70	75	47	26	27	22

#### **IYA-T Participants**

- Majority attended all sessions (5-6)
- Majority of participants were NZ European
- High rates of attrition across phases

#### Child Outcomes – Quantitative Data

To what extent to did caregiver participation in the IYA programme contribute to increased **engagement**, emotional regulation and communication, among young children demonstrating behaviours associated with autism.

Table 1. Summary of evaluation outcomes and overall judgement for Cohort 1 and 2 participants<sup>1</sup>.

Evaluation outcomes	Cohort 1 outcomes	Cohort 1 judgement	Cohort 2 outcomes	Cohort 2 judgement	Overall judgement
Child outcomes (quantitative data)	<ul> <li>Increased participation in home environment</li> <li>Reduction in percentage of activities where change desired</li> </ul>	Adequate	<ul> <li>Reduction in percentage of activities where change desired</li> </ul>	Adequate	Adequate (approaching 'very good)
	Positive trend but minimal change in:		Positive trend but minimal change in:		
	percentage of activities     that the child participates     in		<ul> <li>percentage of activities that the child participates in</li> <li>increased participation in</li> </ul>		
	<ul> <li>average involvement in home activities</li> </ul>		<ul><li>home environment</li><li>average involvement in home activities</li></ul>		

#### Child Outcomes – Quantitative Data

•Overall – Some improvement in child engagement and participation

- Primarily measured using YC-PEM
  - Increased participation in home environment
  - Reduction in number of activities where parents desired change

#### Some improvement but minimal

Involvement in home activities

#### Child Outcomes – Qualitative Data

Table 1. Summary of evaluation outcomes and overall judgement for Cohort 1 and 2 participants1.

Evaluation outcomes	Cohort 1 outcomes	Cohort 1 judgement	Cohort 2 outcomes	Cohort 2 judgement	Overall judgement
Child outcomes (qualitative data)	<ul> <li>Increased engagement, participation learning, social and emotional regulation, communication and understanding.</li> <li>Increased enthusiasm for attending early childhood service</li> <li>Increased inclusion</li> </ul>	Very good	<ul> <li>Increased engagement, participation learning, social and emotional regulation, communication and understanding.</li> <li>Increased enthusiasm for attending early childhood service</li> <li>Increased inclusion</li> </ul>	Very good	

#### Child Outcomes – Qualitative Data

"He never used to join the mat times but now he is the first one to join everything" (Cohort 1: P56D).

Overall – improvement in children's participation and engagement

- Based on Kaiako and caregiver interview responses
  - Increased engagement and participation in learning across home and educational contexts
  - Enhanced social and emotional regulation and communication
  - Increased attendance and enthusiasm to attend
  - Supported inclusion in grater range of activities

#### Caregiver Outcomes – Quantitative Data

To what extent did participation in the IYA programme increase the wellbeing and coping skills of caregivers, enabling them to better support their child.

Table 1. Summary of evaluation outcomes and overall judgement for Cohort 1 and 2 participants1.

Evaluation outcomes	Cohort 1 outcomes	Cohort 1 judgement	Cohort 2 outcomes	Cohort 2 judgement	Overall judgement
Caregiver outcomes (quantitative data)	<ul> <li>No change or a reduction (majority) in parental stress</li> </ul>	Very good	<ul> <li>No change or a reduction (majority) in parental stress</li> </ul>	Very good	Very good

#### Caregiver Outcomes – Quantitative Data

Overall – reduction in parental stress

- Based on APSI
  - For majority of participants, a significant reduction in parental stress was identified

#### Caregiver Outcomes – Qualitative Data

Table 1. Summary of evaluation outcomes and overall judgement for Cohort 1 and 2 participants<sup>1</sup>.

Evaluation outcomes	Cohort 1 outcomes	Cohort 1 judgement	Cohort 2 outcomes	Cohort 2 judgement	Overall judgement
Caregiver outcomes (qualitative data)	<ul> <li>Improvement in wellbeing</li> <li>Increased feelings of parenting confidence and competence</li> <li>Improved relationships between home and centre</li> </ul>	Very good	<ul> <li>Improvement in wellbeing</li> <li>Increased feelings of parenting confidence and competence</li> <li>Improved relationships between parental social relationships</li> </ul>	Very good	Very good

#### Caregiver Outcomes – Qualitative Data

"It made me feel like I wasn't alone. It made me feel like that it wasn't bad parenting... So I think for me as a mum I am more confident about what I am doing and therefore I am more relaxed about things". (Cohort 1: P10H)

Overall – increase in parents' sense of competence, confidence and well-being

- Based on caregiver interviews
- •Positive effect on:
  - Self-efficacy
  - Well-being
  - Confidence and competence
- Enhanced home-school partnership

#### Teacher Outcomes – Quantitative Data

Table 1. Summary of evaluation outcomes and overall judgement for Cohort 1 and 2 participants<sup>1</sup>.

Evaluation outcomes	Cohort 1 outcomes	Cohort 1 judgement	Cohort 2 outcomes	Cohort 2 judgement	Overall judgement
Teacher outcomes (quantitative data)	<ul> <li>Increased confidence in use of strategies</li> <li>Increase in frequency of use of strategies</li> </ul>	Very good	<ul> <li>Increased confidence in use of strategies</li> <li>Increase in frequency of use of strategies</li> </ul>	Very good to excellent	Very good to excellent

#### Teacher Outcomes – Quantitative Data

Overall – significant improvement in teacher confidence and use of strategies

- Based primarily on IYTSQ
  - Increase in confidence in use of strategies taught during IYA-T programme
  - Increase in frequency of strategies used during IYA-T programme

#### Teacher Outcomes – Qualitative Data

Table 1. Summary of evaluation outcomes and overall judgement for Cohort 1 and 2 participants<sup>1</sup>.

Evaluation outcomes	Cohort 1 outcomes	Cohort 1 judgement	Cohort 2 outcomes	Cohort 2 judgement	Overall judgement
Teacher outcomes (qualitative data)	<ul> <li>Increased confidence in knowledge of ASD</li> <li>Increased ability to apply strategies to support children in educational contexts</li> <li>Some reported limited impact</li> </ul>	Very good to excellent	<ul> <li>Increased confidence in knowledge of ASD</li> <li>Increased ability to apply strategies to support children in educational contexts</li> </ul>	Very good to excellent	) 🔻

#### Teacher Outcomes – Qualitative Data

"I feel like beforehand I didn't understand this [ASD] child and I didn't know how to teach these children. Now I feel quite confident that I have the knowledge and some strategies that I can try" (Cohort 1: T118C).

Overall – substantial gains in sense of confidence and competence

- Based on interview data
  - Increased confidence and competence
  - Increased knowledge of autism
  - Equipped them with a range of strategies, able to be applied to other tamariking
- Cohort 1
  - Limited impact on teaching ability already using many of the strategies

## Long-term, Unintended Benefits for Parents – Qualitative Data

Increased communication and collaboration between home and centre

"Now that I know that one of the teachers have attended the course, I know that if now I have a problem with my daughter, she is the one that I can go to because she will be more understanding. Whereas I felt a bit dismissed by the other teacher who didn't attend the course because she didn't really understand."

(Cohort 1: P16H)

- Increased knowledge of ASD
- Having a guidebook to refer to when required

"IYA has given me that toolbox so even if I can't think...I can go find the book and flip through that to see if I can find an idea of something to try if stuff isn't working".

(Cohort 1: P55C).

## Long-term, Unintended Benefits for Parents – Qualitative Data

Improved parental emotional regulation

"Breathing... that is something I learned...deep breathing. I never really thought it would work until they really taught you how to do it. You can't teach a kid how to do it until you know how to do it".

(Cohort 1: P52C)

•Established social supports and relationships with other IYA participants

"The main thing for me was meeting other parents who got you, got what it was about, who understood. Because we've fallen sort of in between the cracks, we don't have a diagnosis, but our child is different, it's quite challenging sometimes because other people don't understand. So it was really nice to talk to people who got it, who just knew what it was like... that was probably for me was the nicest thing, the connection with other parents."

(Cohort 2: P39B)

### Long-term, Unintended Benefits for Parents – Qualitative Data

• Improved understanding of their child, allowing for trusting and loving relationships to be developed

"My husband said to me the other day 'I feel like I'm falling in love with my son for the first time.' That brought tears to my eyes."

(Cohort 2: P34B).

Knowledge sharing among immediate and extended family/whānau

#### Improved relationship with partners

"Overall it made me a more confident person and strangely enough closer to my husband just because we got to spend time together outside of the house without the kids... it was a nice thing to do together and talk about afterwards. Also because he understands me more now...his connection to me now is better because he understands if I can't do something I am not trying to be difficult, it's because I actually can't do it".

(Cohort 1: P16H).

## Long-term, Unintended Benefits for Teachers – Qualitative Data

Increased communication and collaboration between home and centre

"Yes because I had more confidence, and I got very excited about seeing some changes with the child. It meant that every time the parents walk in I would jump up and down and say "hey he did this today!" It meant that the communication between us increases because I am always so excited to see them and they were excited to come in and hear what has been happening".

(Cohort 1: T139D)

Information sharing with colleagues and caregivers

## Long-term, Unintended Benefits for Teachers – Qualitative Data

Increased knowledge of ASD

"I feel like beforehand I didn't understand this [ASD] child and I didn't know how to teach these children. Now I feel quite confident that I have the knowledge and some strategies that I can try" (Cohort 1: T118C). • Embed and generalise IYA strategies into daily practice

"But we found that it didn't matter whether or not the children were ASD or not because those strategies were helping oral language. They were helping different behaviour issues as well so it was kind of beneficial for everyone really."

(Cohort 2: T31B)

## Long-term, Unintended Benefits for Children – Qualitative Data

Increased inclusion in activities and relationships at the early childhood service

"He never used to join the mat times but now he is the first one to join everything" (Cohort 1: P56D)

"One of the big things is that he actually made a friend at school. That is something that is really really hard and he had a play date and he talks about it like "this is my friend!" so that was a very big difference".

(Cohort 2: P75W)

## Long-term, Unintended Benefits for Children – Qualitative Data

Increased engagement and awareness of other children and teachers

"When we're talking to [him], [he]is actually looking up and looking at us, not looking to the side or looking at the floor, or looking anywhere but at the person with [him]. [He is] actually engaging and is doing it to the other children as well"

(Cohort 1: T114C).

### Additional (unpublished) Comments

 Teacher and parent participation in other professional development or parent educational programs

#### Some Limitations of the Evaluation

- Lack of pre- data for many measures
- Limited variation in attendance and characteristics of training and participants prevented some data analyses (e.g., dose-response effects)
- Sample attrition (drop-out)
- Representativeness of respondents and generalisability of findings
- Timing of the ex-post evaluation

### Clinical/Practice Implications of Findings

#### Teachers

- Whole centre teacher participation in the IYA program
- Potential to extend the programme to Primary School teachers
- IYA strategies applicable to all children?
- Community of practice to share experiences and strategies

### Clinical/Practice Implications of Findings

#### **Parents**

Parent support groups that continue beyond the IYA programme

"I would say we had a fantastic group. People were very open and honest. Everyone shared deep emotional things in the group about how they experienced things; it was almost like going for therapy once a week for me." (Cohort 2: P75W)

Long-term follow-up and/or refresher course

### Clinical/Practice Implications of Findings

#### **Facilitators**

Authentic experience working with young children with Autism

I think the facilitators both did a fantastic job actually, and had some really great skills around working with children on the spectrum, so they had a lot of experience as well, so that was really helpful, because you knew it was real life, they had tested their theories, it wasn't just ideas, it was things that worked, or they had found worked.

(Cohort 1: T89F)

• Strong relational skills to establish whakawhanaungatanga amongst parents and teachers

"The attitude of everybody was like we are all here to get help. That was always emphasised by the facilitators, judgement free and we are all here to help. None of us is perfect but we all want to get better. It's a feeling that like we are not a proactive "let's do things" kind of attitude"

(Cohort 1: P37J)

### Questions

