

Preventing Child Maltreatment and Promoting Family Wellbeing Through Online Parent Support Groups in Six Countries

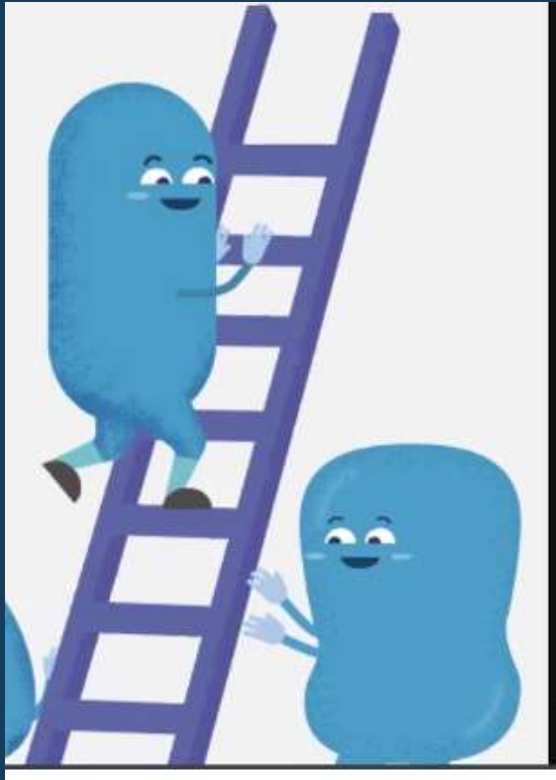
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Context

- Throughout the COVID-19 pandemic parents experienced enormous stress, illness, and financial insecurity ¹
- Limitations to service provision, and increased risk of violence against children ¹
- In-person PLH programmes have reduced the risk of child abuse, child behavior problems and maternal depression ^{2, 3, 4}.
- Digital interventions can overcome challenges faced by in-person interventions and are cost-effective ⁵.
- making them suitable for scale-up in multiple settings ⁶.



¹ UNICEF, 2020; ² Cluver et al, 2016; ³ Lachman et al., 2017; ⁴ Cluver et al., 2019; ⁵ Daley et al., 2020; ⁶ Lopez Garcia et al., 2021

ParentChat – Online Parent Support Groups

PLH programme delivered via



WhatsApp and Viber



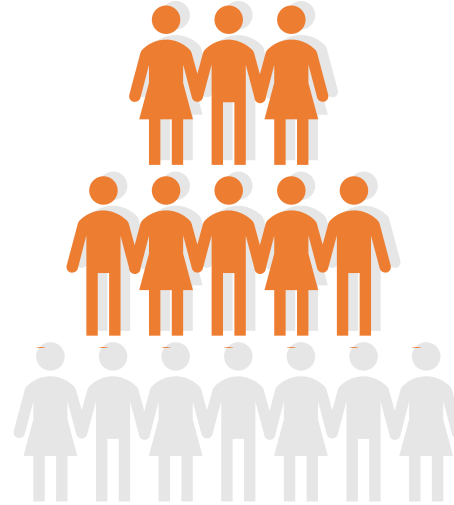
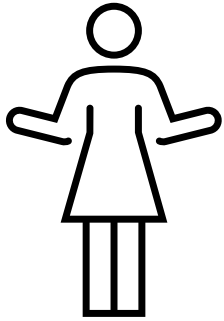
- Illustrated Stories
- Text, audio, image and video messages
- Mimic in-person model



ParentChat – Online Parent Support Groups

1 Facilitator

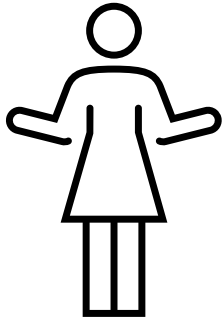
8-15 * Parents of children aged 2-17



X 2 chat sessions per week



ParentChat – Online Parent Support Groups



X 2 chat sessions per week

- **Topics introduced in chat session 1**
 - Illustrated comic
 - Discussion activity
 - Main home activity
- **Feedback given in chat session 2**
 - Discussion of positive experiences and challenges related to the topic
- Practice reminders and check-in messages sent throughout the week



ParentChat Content

WEEKLY:

Session 1: Topics introduced by a Facilitator

Session 2: Feedback given by Parents

EVIDENCE BASED PARENTING CONTENT

ONE-ON-ONE TIME WITH YOUR CHILD

TALKING ABOUT EMOTIONS

DAILY ROUTINES

KEEPING YOUR CHILD SAFE

PRAISE

POSITIVE DISCIPLINE

RESPONDING TO DIFFICULT SITUATIONS

PROBLEM SOLVING

POSITIVE INSTRUCTIONS

SEXUAL VIOLENCE PREVENTION

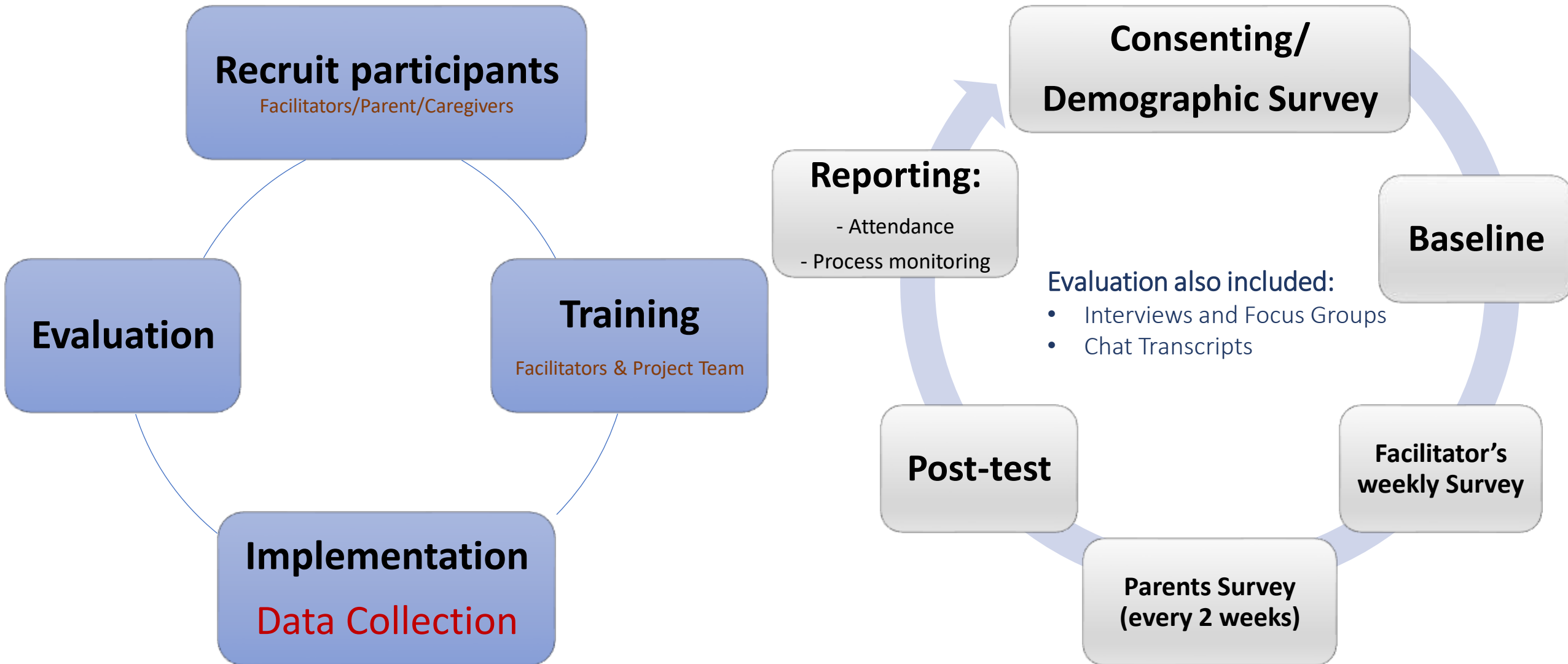
ParentChat Pilot Study



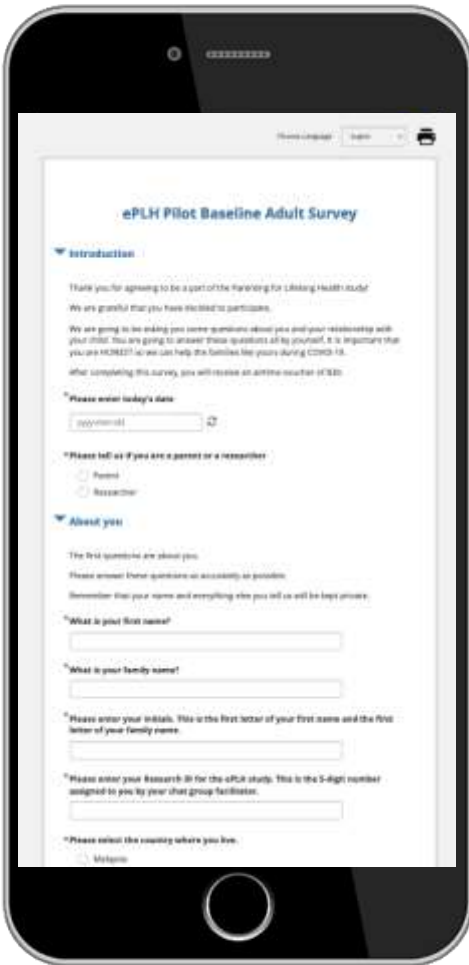
Feasibility Pilot (March-November 2021)

- Staggered deployment across **six countries**
 - North Macedonia, Moldova, Montenegro, Malaysia, Philippines, South Africa

Programme Delivery & M&E



Behavioural and Implementation Outcomes



Behavioural

- Sexual Abuse
- Intimate partner violence and coercion
- Physical and emotional abuse
- Positive parenting
- Parental stress
- Attitudes toward corporal punishment
- Child behaviour problems
- Parental well-being

Implementation

- Attendance and Satisfaction

Results

Part 1: General information

Basic demographic variables (age and gender) of our participants.

Part 2: Pre-post test

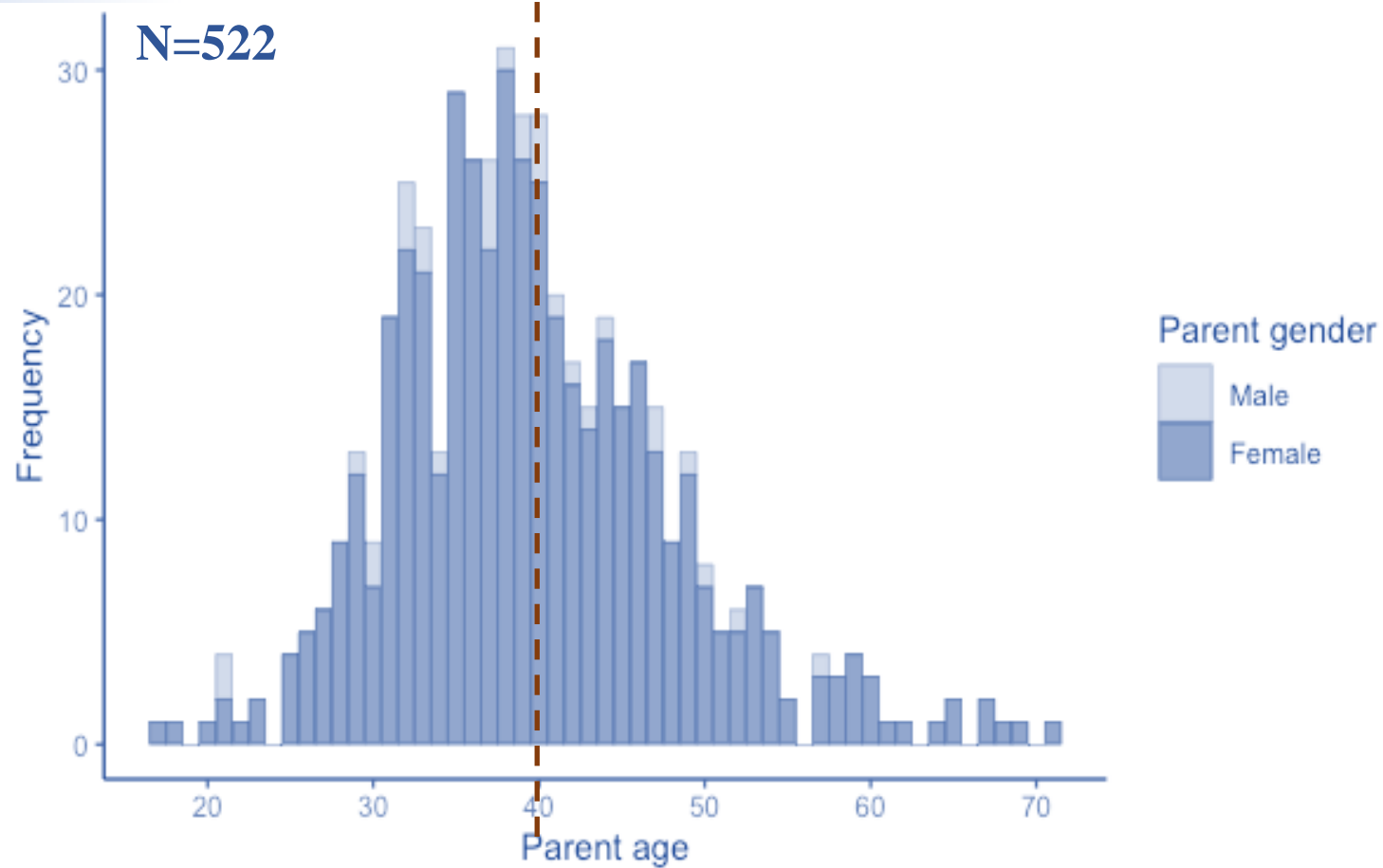
Whether there is a change in behavioral outcomes before and after the intervention?

Part 3: Moderation analysis

Whether the intervention is particularly effective for specific populations?

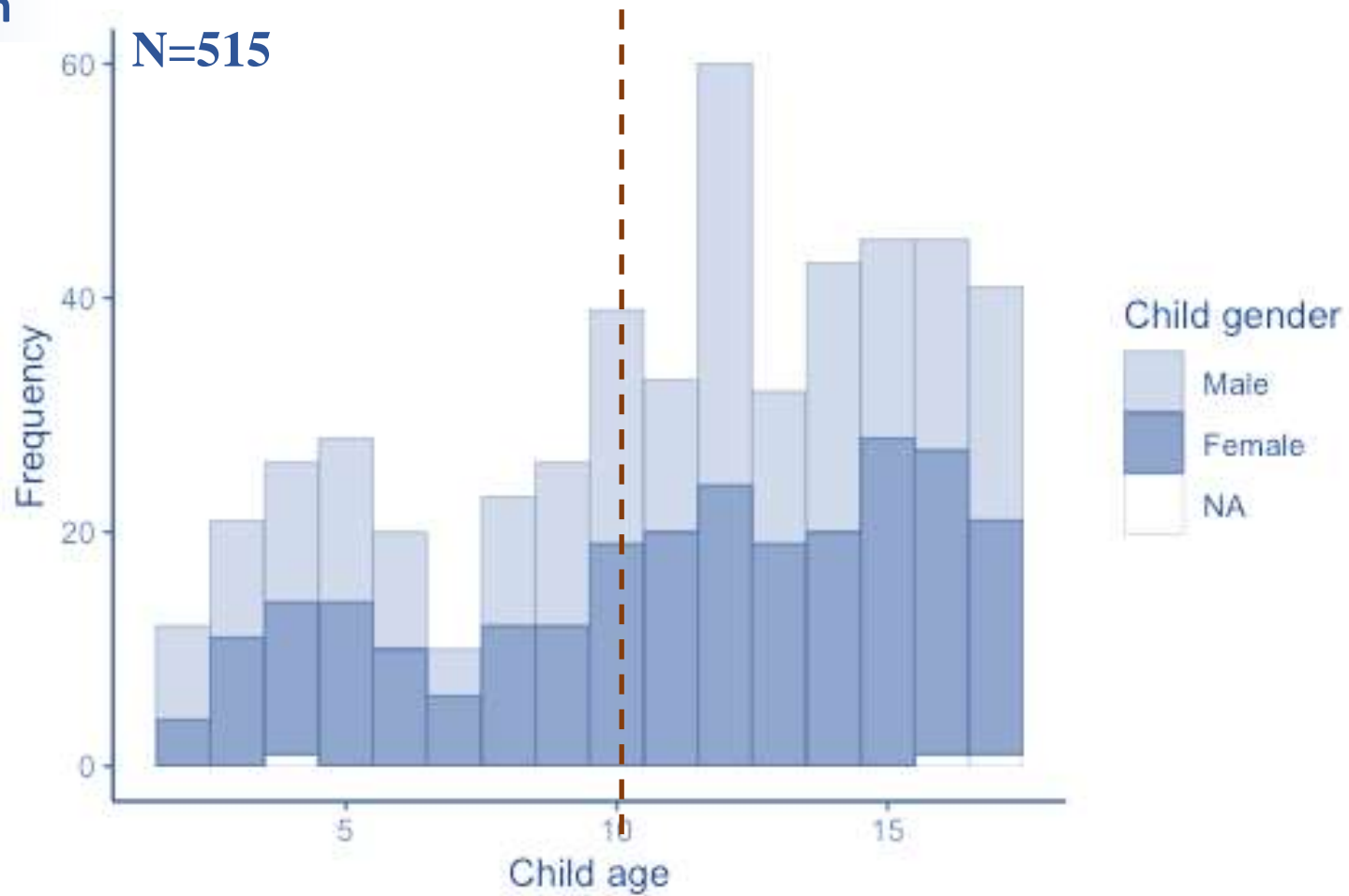
Part 4: Satisfaction and attendance

What role did satisfaction with the intervention and attendance contribute to changes in behavioral outcomes?



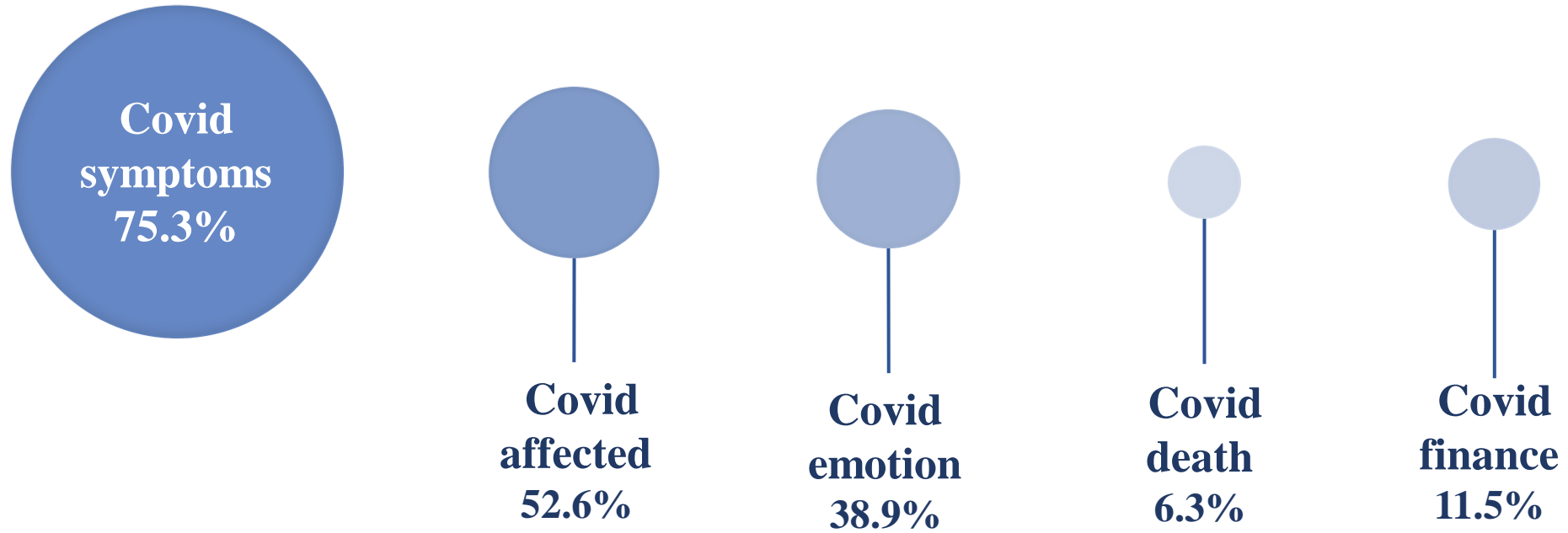
	North Macedonia	Malaysia	Moldova	Montenegro	Philippines	South Africa	Total
Female caregiver, n	44	76	43	50	39	232	484
(%)	(97.8%)	(87.4%)	(100%)	(92.6%)	(97.5%)	(94.3%)	(94.0%)
Caregiver age, M (SD)	38.1 (5.8)	39.5 (6.5)	39.2 (4.7)	37.4 (6.1)	42.4 (8.1)	40.2 (10.5)	39.6 (8.6)

Distribution of Child Age and Gender



	North Macedonia	Malaysia	Moldova	Montenegro	Philippines	South Africa	Total
Girl, n (%)	30 (63.8%)	45 (51.7%)	28 (58.3%)	22 (40.7%)	17 (42.5%)	126 (51.2%)	268 (51.3%)
Child age, M (SD)	8.3 (4.3)	10.4 (3.6)	12.5 (1.9)	8.0 (4.7)	11.6 (3.7)	12.0 (4.3)	10.3 (4.2)

Part 1: General Information



Intraclass Correlation Coefficient (ICC) for Three Level Factors

random effect	ICC	SE	95% CI
ID	0.84	0.02	0.78, 0.87
facilitator	0.40	0.07	0.26, 0.53
country	0.06	0.04	-0.02, 0.13

Method: Multilevel regression model, facilitator and id are two nested random effects.
Note. Y = overall maltreatment, regression = Poisson. ICC for country is small and not considered as a random effect in regression models.

$$\text{Outcome behavior} \sim (1/\text{facilitator id}) + (1/\text{facilitator id:participant id}) + \text{Time}$$

Part 2: Pre-Post Test

- **Overall maltreatment ---distribution check**
- *Unit measure for “ICAST”: 0 to 7 and 8 for more than or equal to 8 in the past 4 weeks*

“Poisson is a discrete probability distribution that expresses the probability of a given number of events occurring in a fixed interval of time or space”

- **Positive parent involvement ---multilevel linear regression**
- *Unit measure for "Often": 0 = Never; 1 = Sometimes; 2 = Often; 3 = Always*

- **Attitude towards punishment: Parent agrees on physical punishment to discipline child---multilevel logistic regression**
- *Unit measure for(0 = No; 1 = Yes)*

Results of Multilevel Regression Analyses for Behaviour Outcomes

	Mean _{pre}	SD _{pre}	Mean _{post}	SD _{post}	β	SE	p value	IRR/ OR	95% lower CI	95% upper CI
Overall maltreatment	4.89	4.67	2.86	3.40	-0.56	0.04	<0.001	0.57	0.53	0.61
Physical abuse	0.99	2.02	0.63	1.56	-0.44	0.09	<0.001	0.64	0.54	0.77
Psychological abuse	3.93	3.62	2.25	2.48	-0.61	0.04	<0.001	0.55	0.50	0.59
IPV coercion	1.76	3.19	1.59	2.88	-0.19	0.07	0.003	0.82	0.72	0.93
IPV respect	4.21	2.92	4.83	2.69	0.13	0.04	0.003	1.14	1.04	1.24
IPV victimisation	0.75	1.78	0.60	1.54	-0.28	0.12	0.021	0.75	0.59	0.96
IPV perpetration	0.15	0.85	0.13	0.96	0.06	0.28	0.839	1.06	0.61	1.83
Positive parenting	9.28	4.51	11.00	3.86	0.12	0.02	<0.001	1.13	1.08	1.18
Parental stress	3.26	2.56	2.48	2.18	-0.29	0.04	<0.001	0.75	0.69	0.82
Parental depression	4.66	3.39	3.86	2.90	-0.59	0.18	0.001	NA	NA	NA
Efficacy to sexual abuse	5.83	2.74	6.36	2.16	0.40	0.14	0.005	NA	NA	NA
Child misbehaviour intensity	3.75	2.55	2.92	2.21	-0.87	0.16	<0.001	NA	NA	NA
Child misbehaviour	6.65	4.61	5.08	3.61	-1.78	0.21	<0.001	NA	NA	NA
Attitude towards punishment	0.22	0.41	0.12	0.32	-0.62	0.25	0.012	0.54	0.33	0.88

Results of Multilevel Regression Analyses for Behaviour Outcomes

		Mean _{pre}	SD _{pre}	Mean _{post}	SD _{post}	β	SE	p value	IRR/ OR	95% lower CI	95% upper CI
Overall maltreatment	↓ 43%	4.89	4.67	2.86	3.40	-0.56	0.04	<0.001	0.57	0.53	0.61
Physical abuse	↓ 46%	0.99	2.02	0.63	1.56	-0.44	0.09	<0.001	0.64	0.54	0.77
Psychological abuse	↓ 45%	3.93	3.62	2.25	2.48	-0.61	0.04	<0.001	0.55	0.50	0.59
IPV coercion		1.76	3.19	1.59	2.88	-0.19	0.07	0.003	0.82	0.72	0.93
IPV respect		4.21	2.92	4.83	2.69	0.13	0.04	0.003	1.14	1.04	1.24
IPV victimisation		0.75	1.78	0.60	1.54	-0.28	0.12	0.021	0.75	0.59	0.96
IPV perpetration		0.15	0.85	0.13	0.96	0.06	0.28	0.839	1.06	0.61	1.83
Positive parenting		9.28	4.51	11.00	3.86	0.12	0.02	<0.001	1.13	1.08	1.18
Parental stress		3.26	2.56	2.48	2.18	-0.29	0.04	<0.001	0.75	0.69	0.82
Parental depression		4.66	3.39	3.86	2.90	-0.59	0.18	0.001	NA	NA	NA
Efficacy to sexual abuse		5.83	2.74	6.36	2.16	0.40	0.14	0.005	NA	NA	NA
Child misbehaviour intensity		3.75	2.55	2.92	2.21	-0.87	0.16	<0.001	NA	NA	NA
Child misbehaviour		6.65	4.61	5.08	3.61	-1.78	0.21	<0.001	NA	NA	NA
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Results of Multilevel Regression Analyses for Behaviour Outcomes

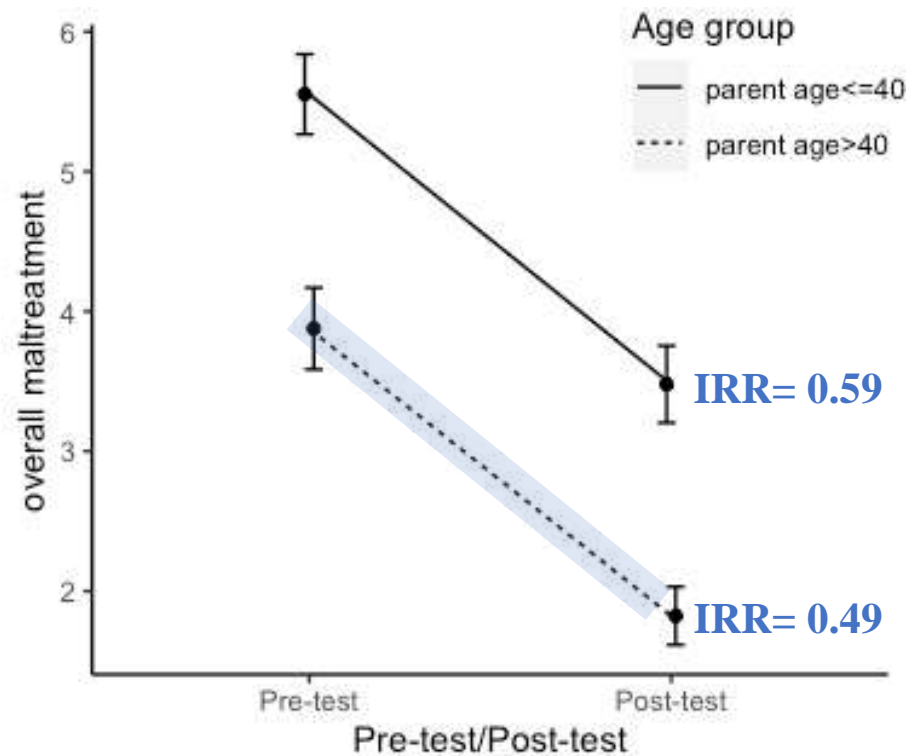
		Mean _{pre}	SD _{pre}	Mean _{post}	SD _{post}	β	SE	p value	IRR/ OR	95% lower CI	95% upper CI
Overall maltreatment		4.89	4.67	2.86	3.40	-0.56	0.04	<0.001	0.57	0.53	0.61
Physical abuse		0.99	2.02	0.63	1.56	-0.44	0.09	<0.001	0.64	0.54	0.77
Psychological abuse		3.93	3.62	2.25	2.48	-0.61	0.04	<0.001	0.55	0.50	0.59
IPV coercion	↓ 18%	1.76	3.19	1.59	2.88	-0.19	0.07	0.003	0.82	0.72	0.93
IPV respect	↑ 14%	4.21	2.92	4.83	2.69	0.13	0.04	0.003	1.14	1.04	1.24
IPV victimisation	↓ 25%	0.75	1.78	0.60	1.54	-0.28	0.12	0.021	0.75	0.59	0.96
IPV perpetration	→	0.15	0.85	0.13	0.96	0.06	0.28	0.839	1.06	0.61	1.83
Positive parenting		9.28	4.51	11.00	3.86	0.12	0.02	<0.001	1.13	1.08	1.18
Parental stress		3.26	2.56	2.48	2.18	-0.29	0.04	<0.001	0.75	0.69	0.82
Parental depression		4.66	3.39	3.86	2.90	-0.59	0.18	0.001	NA	NA	NA
Efficacy to sexual abuse		5.83	2.74	6.36	2.16	0.40	0.14	0.005	NA	NA	NA
Child misbehaviour intensity		3.75	2.55	2.92	2.21	-0.87	0.16	<0.001	NA	NA	NA
Child misbehaviour		6.65	4.61	5.08	3.61	-1.78	0.21	<0.001	NA	NA	NA
Attitude towards punishment		0.22	0.41	0.12	0.32	-0.62	0.25	0.012	0.54	0.33	0.88

Part 2: Pre-Post Test

Results of Multilevel Regression Analyses for Behaviour Outcomes

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Psychological abuse		3.93	3.62	2.25	2.48	-0.61	0.04	<0.001	0.55	0.50	0.59
IPV coercion		1.76	3.19	1.59	2.88	-0.19	0.07	0.003	0.82	0.72	0.93
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Positive parenting	↑ 13%	9.28	4.51	11.00	3.86	0.12	0.02	<0.001	1.13	1.08	1.18
Parental stress	↓ 25%	3.26	2.56	2.48	2.18	-0.29	0.04	<0.001	0.75	0.69	0.82
Parental depression	↓ 17%	4.66	3.39	3.86	2.90	-0.59	0.18	0.001	NA	NA	NA
Efficacy to sexual abuse	↑ 9%	5.83	2.74	6.36	2.16	0.40	0.14	0.005	NA	NA	NA
Child misbehaviour intensity	↓ 22%	3.75	2.55	2.92	2.21	-0.87	0.16	<0.001	NA	NA	NA
Child misbehaviour	↓ 24%	6.65	4.61	5.08	3.61	-1.78	0.21	<0.001	NA	NA	NA
Attitude towards punishment	↓	22.8% yes	---	11.7% Yes	---	-0.62	0.25	0.012	0.54	0.33	0.88

Part 3: Moderation Analysis

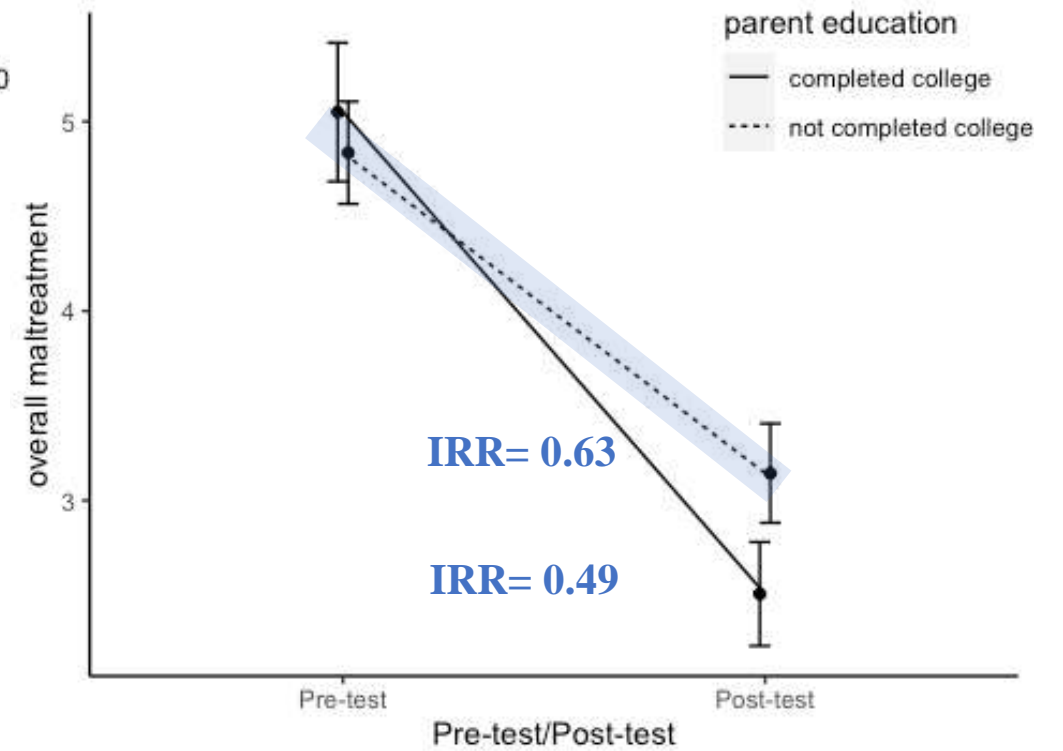
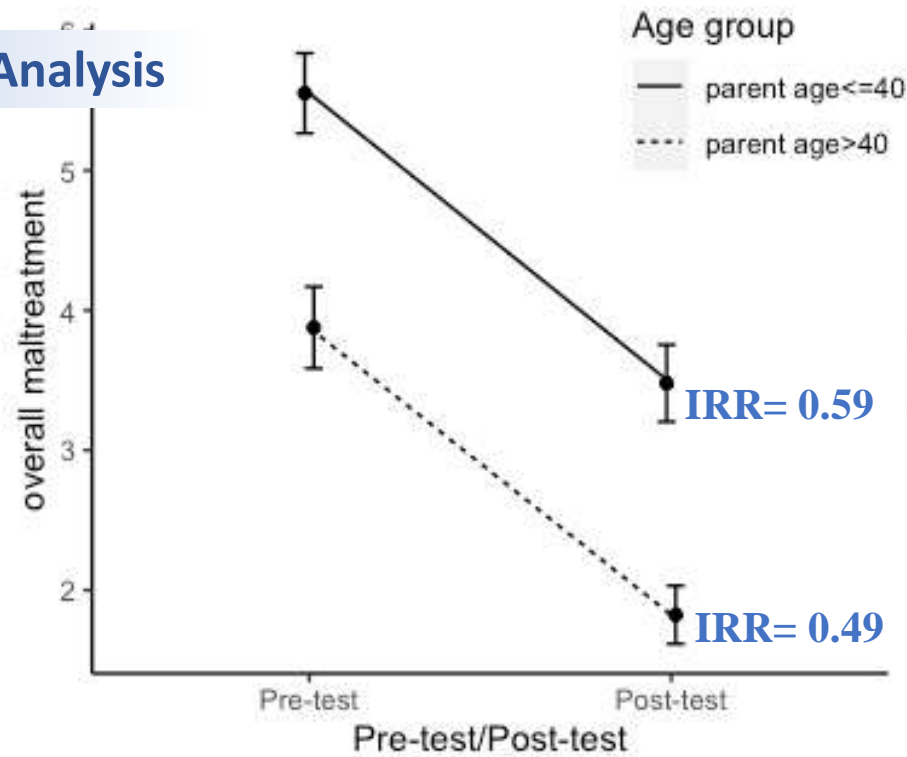


Moderating Effect of Demographic Factors on Overall Maltreatment

	beta	Std. Error	z value	p value	IRR	95% lower CI	95% upper CI
Time	-0.61	0.04	-14.37	<0.001	0.54	0.50	0.59
Parent age	-0.13	0.05	-2.71	0.007	0.88	0.80	0.96
Time*Parent Age	-0.18	0.05	-3.81	<0.001	0.83	0.76	0.92
Time	-0.46	0.05	-8.76	<0.001	0.63	0.57	0.70
Parent education	0.03	0.11	0.26	0.794	1.03	0.84	1.26
Time*Parent education	-0.24	0.08	-2.89	0.004	0.79	0.67	0.93

ParentChat intervention was particularly effective in improving overall maltreatment for **older parents, & those who completed college parents.**

Part 3: Moderation Analysis



The Moderating Effect of Demographic Factors on Overall Maltreatment

	beta	Std. Error	z value	p value	IRR	95% lower CI	95% upper CI
Time	-0.61	0.04	-14.37	<0.001	0.54	0.50	0.59
Parent age	-0.13	0.05	-2.71	0.007	0.88	0.80	0.96
Time*Parent Age	-0.18	0.05	-3.81	<0.001	0.83	0.76	0.92
Time	-0.46	0.05	-8.76	<0.001	0.63	0.57	0.70
Parent education	0.03	0.11	0.26	0.794	1.03	0.84	1.26
Time*Parent education	-0.24	0.08	-2.89	0.004	0.79	0.67	0.93

ParentChat intervention particularly effective in improving overall maltreatment for **older parents & completed college parents.**

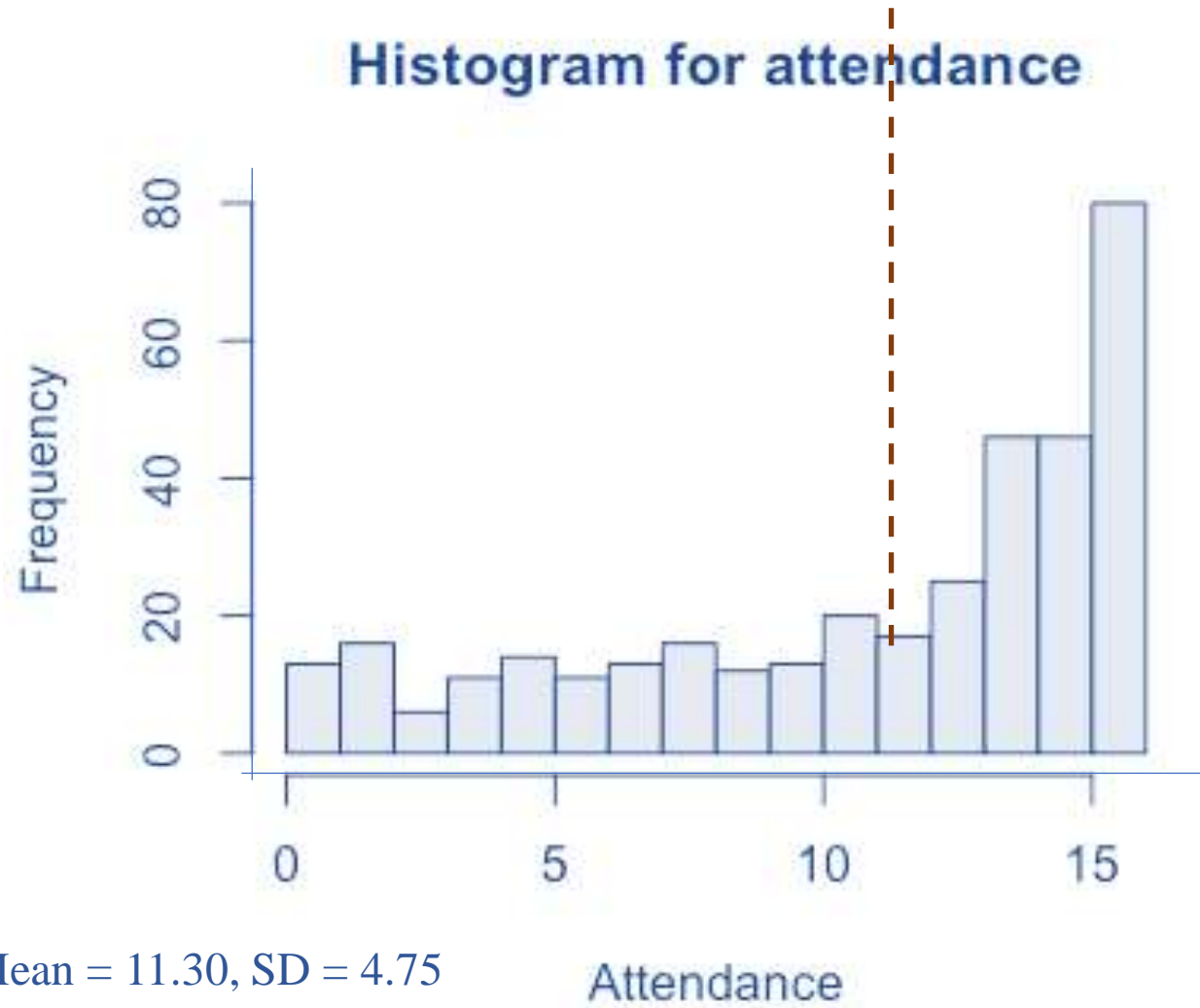
Part 3: Moderation Analysis

The Moderating Effect of Baseline Situation of Secondary Outcomes on Overall Maltreatment

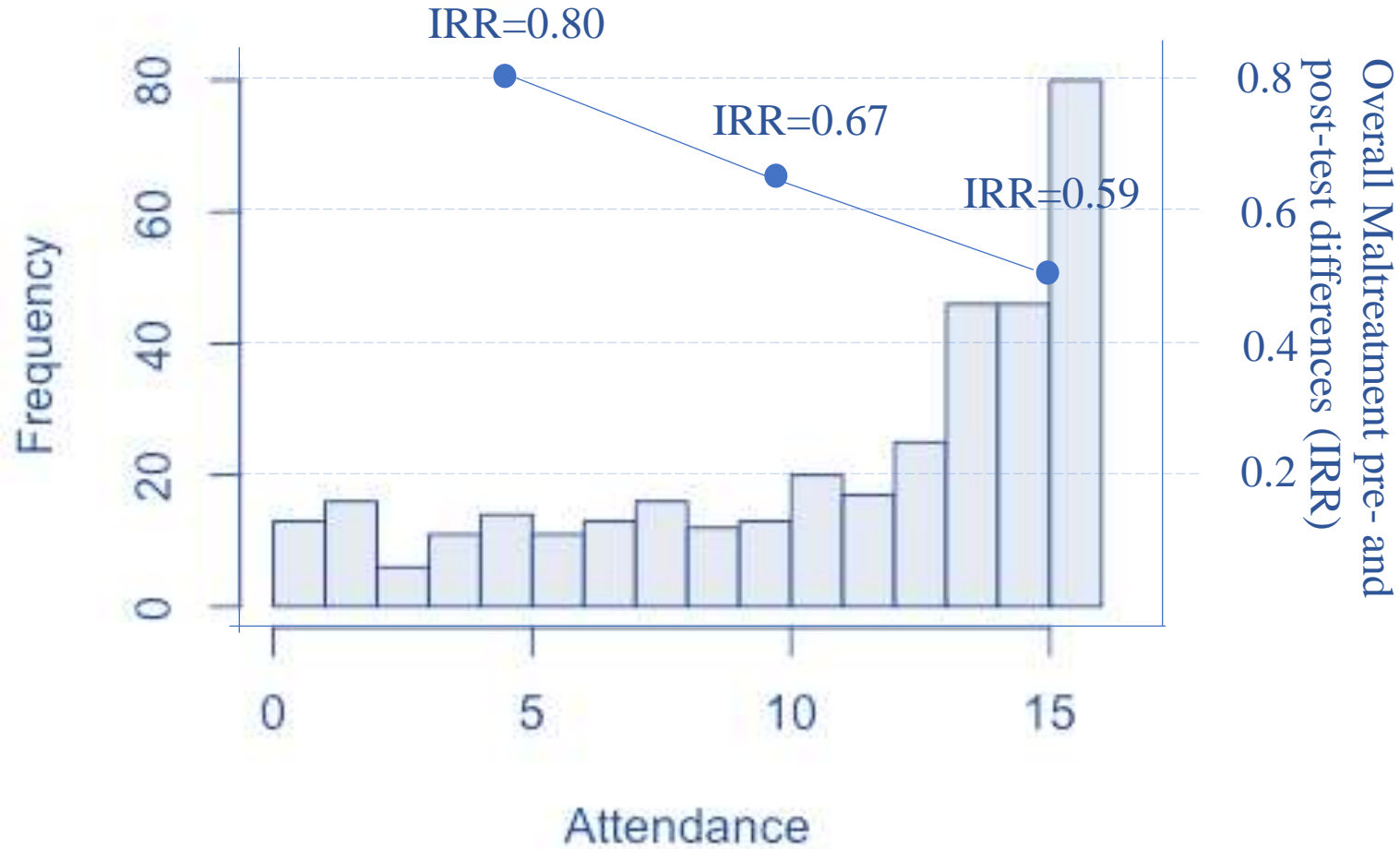
	beta	Std. Error	z value	p value	IRR	95% lower CI	95% upper CI
Time	-0.55	0.04	-13.80	0.000	0.57	0.53	0.62
Parental depression	0.07	0.01	5.01	<0.001	1.07	1.04	1.10
Time*Parental depression	-0.04	0.01	-3.34	0.001	0.96	0.94	0.98
Time	-0.51	0.00	-802.57	<0.001	0.60	0.60	0.60
Parental stress	0.50	0.00	788.84	<0.001	1.66	1.65	1.66
Time*Parental stress	-0.15	0.00	-227.70	<0.001	0.86	0.86	0.87
Time	-0.53	0.04	-12.65	<0.001	0.59	0.54	0.64
Child misbehaviour intensity	0.15	0.02	7.74	<0.001	1.16	1.11	1.20
Time*Child misbehaviour intensity	-0.10	0.02	-5.82	<0.001	0.90	0.87	0.93
Time	-0.48	0.04	-11.63	<0.001	0.62	0.57	0.67
Child misbehaviour	0.29	0.02	13.22	<0.001	1.34	1.28	1.40
Time*Child misbehaviour	-0.11	0.02	-6.20	<0.001	0.89	0.86	0.93

The higher the baseline parental depression, parental stress, child misbehavior intensity and child misbehavior, the greater their overall maltreatment improvement. ParentChat is especially effective for families with poor parental mental health and more severe child misbehavior.

Part 4: Satisfaction & Attendance



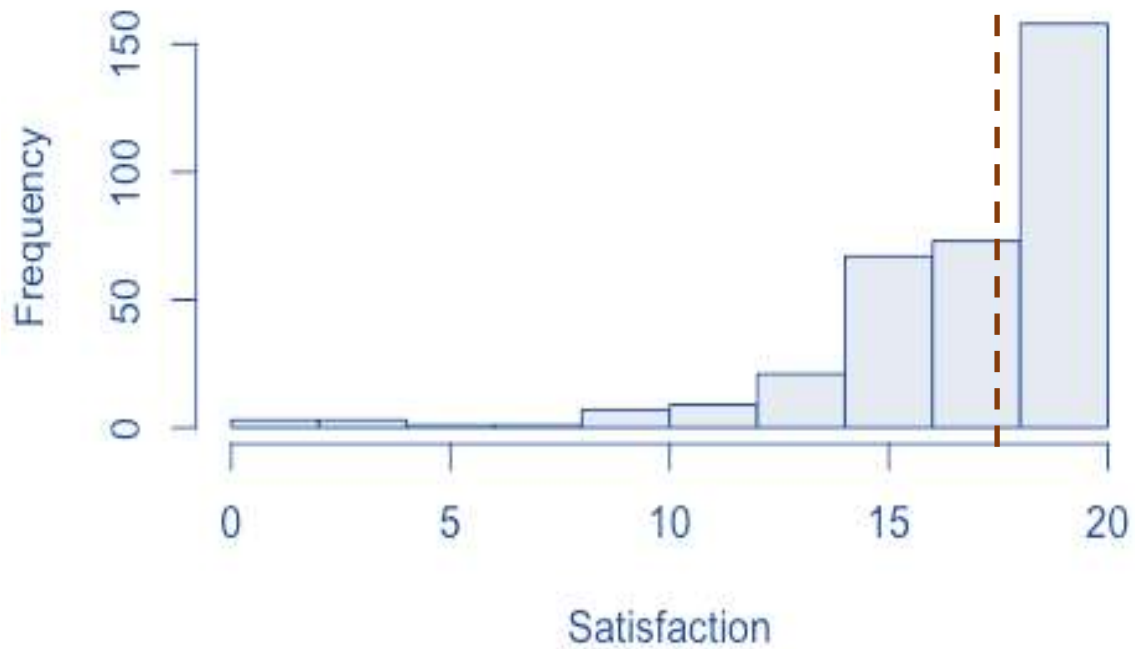
Histogram for attendance



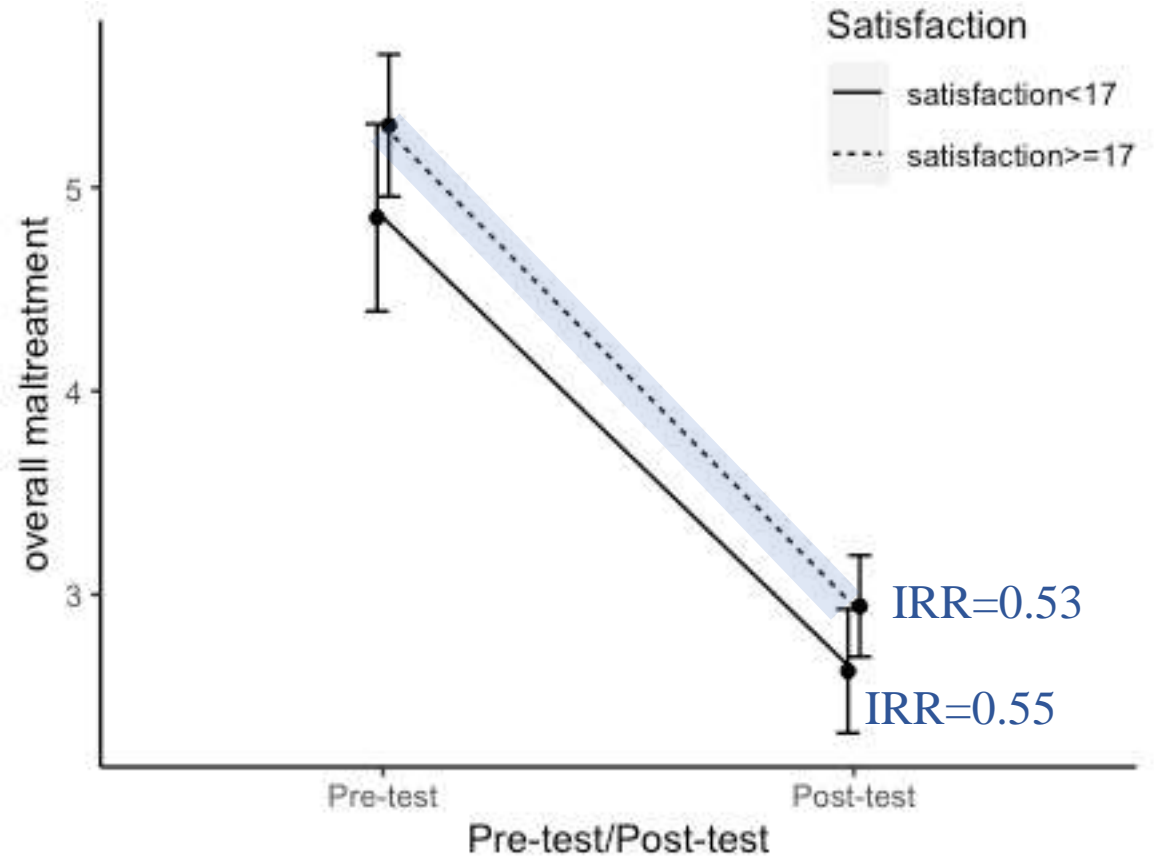
	beta	Std. Error	z value	p value	IRR	95% lower CI	95% upper CI
Time	-0.22	0.14	-1.61	0.106	0.80	0.60	1.05
Attendance	0.01	0.01	1.19	0.236	1.01	0.99	1.04
Time*Attendance	-0.03	0.01	-2.52	0.012	0.97	0.95	1.00

Part 4: Satisfaction & Attendance

Histogram for satisfaction



Note. Mean = 17.26, SD = 3.39



Satisfaction did not show the moderation analysis on overall maltreatment ($p = 0.451$)

Part 1: General information

Most of our intervention participants were female parents, and more than half were affected by the epidemic.

Part 2: Pre-post test

The primary and secondary variables were significantly improved, with overall maltreatment decreasing by 47% (except for IPV perpetration).

Part 3: Moderation analysis

The intervention was more effective in older and college-educated parents and families with poor parental mental health and more severe child misbehavior.

Part 4: Satisfaction and attendance

The satisfaction with the intervention and attendance were at a high level. The higher the attendance, the greater the decrease in overall maltreatment.

Next Steps

- Adaptation of ParentChat (ongoing)
- Scale up with RCT ParentChat for Young Children in Malaysia (2022-2023)
- Scale up of hybrid ParentChat / In-Person delivery in South Africa (2022-2023)
- Trials of additional digital and hybrid delivery PLH programmes as part of the Global Parenting Initiative (2022-2027)

