
Bilag forskningsprojektet READ i plejefamilie

INDHOLDSFORTEGNELSE

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1. Balance tests

The tables below report two-sample t-tests with equal variances for pre-test scores (standardized on the whole sample) and control variables/background characteristics for children in and out of foster care (not standardized). Of the social and emotional difficulty scores, the subscales emotional symptoms, conduct problems, and hyperactivity are scaled negatively. The sum score of total difficulties does not include the subscale prosocial behavior. The control/background variables are positively scaled ordinal variables (e.g. higher = higher education), except for child's immigrant status, household income and single parenthood which are binary variables with a reference category (reported in the table). Treatment and control groups did not significantly differ on language and literacy pre-test scores but did so on prosocial behavior ($p = .026$) for children in foster care and there was more single parenthood for children from non-foster care families ($p = .022$).

1.1 Children in foster care

Table 1: Pre-tests scores and children's background characteristics

	Control		Treatment		<i>diff</i>	<i>se</i>	<i>t-stat</i>	<i>p-value</i>
	<i>obs.</i>	<i>mean</i>	<i>obs.</i>	<i>mean</i>				
Vocabulary	98	-0.216	107	-0.25	0.034	0.147	0.25	0.819
Rhyme	98	-0.317	107	-0.382	0.065	0.138	0.45	0.637
Print	68	-0.243	69	-0.25	0.006	0.181	0.05	0.971
Deletion	68	-0.233	69	-0.366	0.134	0.152	0.90	0.382
Math vocabulary	96	-0.201	107	-0.457	0.257	0.159	1.60	0.108
Numeracy	96	-0.103	107	-0.324	0.221+	0.13	1.70	0.091
Age at pre-test	97	4.628	107	4.519	0.108	0.133	0.80	0.415
Gender (ref. girls)	99	0.545	108	0.611	-0.066	0.069	-0.95	0.342

Note: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 2: Social and Emotional Difficulties Questionnaire (SDQ) subscales

	Control		Treatment		<i>diff</i>	<i>se</i>	<i>t-stat</i>	<i>p-value</i>
	<i>obs.</i>	<i>mean</i>	<i>obs.</i>	<i>mean</i>				
Emotional symptoms	69	0.414	94	0.227	0.188	0.157	1.20	0.232
Conduct problems	69	0.239	94	0.355	-0.116	0.197	-0.60	0.557
Hyperactivity	69	0.573	94	0.496	0.076	0.161	0.50	0.635
Peer problems	69	0.115	94	0.376	-0.261	0.184	-1.4	0.159
Prosocial behavior	69	0.006	94	-0.395	0.401*	0.178	2.25	0.026
Total difficulties	69	0.541	94	0.527	0.013	0.161	0.10	0.932

Note: + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 3: Background characteristics from Statistics Denmark

	Control	Treatment		<i>p-value</i>
	<i>mean</i>	<i>mean</i>	<i>se</i>	
Child's immigrant status (ref. descendant/immigrant)	0.121	0.087	.040	0.403
Mother's education – biological mother	1.180	1.115	.055	0.233
Father's education – biological father	1.435	1.304	.091	0.151
Household income (log) – biological family	7.559	7.396	.793	0.838
Single parenthood - biological family (ref. married/co-habiting parents)	0.026	0.009	.017	0.320
Mother's education - foster mother	2.380	2.402	.102	0.828
Father's education – foster father	2.114	2.143	.117	0.804
Household income (log) – foster family	13.725	13.726	.061	0.974
Single parenthood - foster family (ref. married/co-habiting parents)	0.018	0.009	.016	0.574

Note. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Some statistics are blinded due to anonymity.

1.2 Children not in foster care

Table 4: Pre-tests scores and children's background characteristics

	Control		Treatment		<i>diff</i>	<i>se</i>	<i>t-stat</i>	<i>p-value</i>
	<i>obs.</i>	<i>mean</i>	<i>obs.</i>	<i>mean</i>				
Vocabulary	116	0.162	118	0.251	-0.089	0.118	-0.75	0.452
Rhyme	116	0.207	118	0.394	-0.186	0.119	-1.55	0.119
Print	62	0.164	68	0.331	-0.168	0.152	-1.10	0.273
Deletion	62	0.36	68	0.288	0.072	0.178	0.40	0.687
Math vocabulary	112	0.229	113	0.366	-0.137	0.099	-1.40	0.167
Numeracy	112	0.130	113	0.271	-0.141	0.137	-1.05	0.300
Age at pre-test	116	4.319	118	4.377	-0.058	0.106	-0.55	0.588
Gender (ref. girls)	119	0.446	120	0.567	-0.121+	0.065	-1.90	0.061

Note. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The marginal significant difference between the groups in terms of gender disappears if the balance test is estimated with cluster robust standard errors.

Table 5: Social and Emotional Difficulties Questionnaire (SDQ) subscales

	Control		Treatment		<i>diff</i>	<i>se</i>	<i>t-stat</i>	<i>p-value</i>
	<i>obs.</i>	<i>mean</i>	<i>obs.</i>	<i>mean</i>				
Emotional symptoms	103	-0.228	116	-0.228	0.001	0.129	0.00	0.996
Conduct problems	103	-0.158	116	-0.289	0.132	0.093	1.40	0.161
Hyperactivity	103	-0.374	116	-0.41	0.036	0.107	0.35	0.738
Peer problems	103	-0.151	116	-0.238	0.087	0.109	0.80	0.424
Prosocial behavior	103	0.270	116	0.076	0.195+	0.114	1.70	0.090
Total difficulties	103	-0.355	116	-0.434	0.079	0.106	0.75	0.460

Note. + p<0.1, *, p<0.05, ** p<0.01, *** p<0.001. The marginal significant difference between the groups in terms of Prosocial behavior remains if the balance test is estimated with cluster robust standard errors.

Table 5: Background characteristics from Statistics Denmark

	Control	Treatment	<i>se</i>	<i>p-value</i>
	<i>mean</i>	<i>mean</i>		
Child's immigrant status (ref. descendant/immigrant)	0.055	0.048	0.028	0.799
Mother's education – biological mother	3.172	3.311	0.110	0.209
Father's education – biological father	2.991	2.958	0.129	0.789
Household income (log) – biological family	13.179	13.264	0.257	0.743
Single parenthood - biological family (ref. married/co-habiting parents)	-	-	-	0.022

Note: + p<0.1, *, p<0.05, ** p<0.01, *** p<0.001. Some statistics are blinded due to anonymity.

2. Pre- and posttest scores

Table 8. Pretest and posttest scores on study measures by group of children and condition

Measure	Children in foster care				Children not in foster care			
	Control		Treatment		Control		Treatment	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
<i>Language and literacy</i>								
Vocabulary	14.74 (10.3)	19.99 (11.7)	14.47 (10.2)	18.77 (10.8)	18.45 (0.9)	23.96 (9.4)	19.31 (8.6)	23.99 (8.4)
Rhyme	5.66 (5.6)	8.03 (5.4)	5.26 (5.7)	7.85 (5.6)	8.63 (5.6)	11.45 (3.8)	9.69 (4.8)	11.01 (4.5)
Print awareness ^a	6.75 (3.8)	7.44 (3.7)	6.74 (4.3)	7.69 (4.7)	8.31 (3.3)	9.82 (3.5)	8.94 (3.2)	9.97 (4.0)
Deletion ^a	3.54 (3.8)	5.17 (4.5)	2.90 (4.0)	3.89 (4.4)	6.08 (4.2)	6.01 (4.4)	5.76 ^b (4.7)	5.21 ^b (4.7)
<i>Math</i>								
Math vocabulary	10.47 (4.3)	11.72 (3.4)	9.48 (4.7)	11.19 (4.3)	12.21 (3.2)	13.51 (2.7)	12.76 (2.7)	13.69 (2.6)
Numeracy	5.02 (4.2)	6.83 (5.3)	3.93 (4.8)	6.33 (5.1)	6.14 (5.0)	8.37 (5.6)	6.83 (5.0)	8.30 (5.8)
<i>Executive functions</i>								
Inhibitory control	0.47 (0.2)	0.56 (0.3)	0.44 (0.2)	0.55 (0.2)	0.50 (0.2)	0.61 (0.2)	0.55 (0.2)	0.60 (0.3)
Attention shifting	4.71 (3.9)	6.26 (3.6)	4.43 (3.7)	5.60 (3.7)	5.46 (4.2)	6.93 (3.9)	5.99 (4.3)	6.58 (4.1)
Visual memory	1.37 (1.0)	1.67 (0.9)	1.05 (0.9)	1.43 (0.9)	1.44 (0.9)	1.64 (0.8)	1.45 (0.9)	1.70 (0.9)

Social-emotional

Emotional symptoms	4.13 (2.3)	3.66 (2.3)	3.69 (2.3)	3.85 (2.6)	2.63 (2.2)	2.71 (2.5)	2.63 (2.2)	2.27 (2.1)
Conduct problems	2.36 (2.0)	2.77 (1.9)	2.55 (2.1)	2.71 (2.2)	1.71 (1.0)	1.71 (1.4)	1.49 (1.2)	1.56 (1.5)
Hyperact./Inattention	4.91 (2.5)	5.11 (2.6)	4.72 (2.5)	4.71 (2.7)	2.56 (1.9)	2.52 (1.6)	2.47 (2.0)	2.26 (1.9)
Peer problems	2.91 (1.4)	3.18 (1.7)	3.28 (1.8)	3.43 (1.8)	2.54 (1.1)	2.71 (1.3)	2.42 (1.1)	2.65 (1.2)
Prosocial	6.74 (1.1)	6.56 (1.6)	6.18 (1.8)	6.11 (1.8)	7.11 (1.1)	7.28 (1.0)	6.84 (1.3)	7.11 (1.1)

Note. ^a Administered only to 4- to 6 years-olds. ^b Not significant ($p > .05$).

3. Home literacy environment

Table 7: Home literacy environment characteristics of recruited families before the READ intervention

	Children in foster care		Children not in foster care	
	Control	Treatment	Control	Treatment
Children, n	118	117	131	129
Families, n	104	110	125	124
How many children books do you have in your home?				
% 0-10	0	2.11	0.97	0.00
% 11-25	4.23	3.16	1.94	1.72
% 26-50	25.35	22.11	19.42	18.10
% 51-100	38.03	38.95	45.63	37.07
% 101-200	26.76	21.05	19.42	29.31
% >200	5.63	12.63	12.62	13.79
How old was your child when you started to read to her/him?				
% Haven't started yet	0	2.13	0	0
% 0-6 months	23.94	15.96	38.83	39.66
% 7-12 months	26.76	32.98	44.66	44.83
% 13-18 months	19.72	13.83	11.65	13.79
% 19-24 months	8.45	13.83	3.88	0.86
% >24 months	21.13	21.28	0.97	0.86
How many times was your child read to at home in the past week?				
% 0 times a week	0	1.06	2.91	0.86
% 1 time a week	4.23	5.32	2.91	5.17
% 2 times a week	12.68	14.89	2.91	5.17
% 3-6 times a week	32.39	25.53	17.48	18.10
% 1 time per day	38.03	39.36	59.22	50.86
% Several times per day	12.68	13.83	17.48	25.00
How many times have you read children's rhyme (for example Halfdan Rasmussens ABC) or other books				
% 0 times a week	33.80	26.60	33.98	37.93
% 1 time a week	25.35	35.11	29.13	25.00
% 2 times a week	19.72	13.83	22.33	20.69
% 3-6 times a week	18.31	18.09	12.62	14.66
% 1 time per day	1.41	5.32	1.94	1.72
% Several times per day	1.41	1.06	0	0
When reading to your child, do you point at the pictures and say what can be seen or describe it?*				
% Never	0	0	1.94	1.72
% Sometimes	30.99	37.23	46.60	68.10
% Almost always	69.01	62.77	51.46	30.17

Note. For children in foster care this is data on their foster parents' home literacy environment. *significant difference between control and treatment group of children not in foster care. Parents of children in the control group scored significantly higher on elaborating and pointing to pictures when reading compared to the treatment group.

4. Model decisions

Decisions made for all models:

- (Multilevel) regressions were built up using structural equation modelling in the statistics software STATA (command ‘sem’). Through this command the estimator technique Full Information Maximum Likelihood (FIML) could be used to estimate the values of parameters with missing values by determining the value that maximizes the likelihood function based on the sample data that is non-missing. FIML made it possible to use the full sample of children in the regression analyses for most outcomes (n= 235 foster care children; n=260 children not in foster care), except for print awareness and deletion posttest which consisted a smaller subset of children due to the tasks not being administered for the 3-year-olds (n=177 foster care children; n=193 children not in foster care).
- Posttest scores were standardized across the whole sample to have a mean of 0 and standard deviation of 1, enabling regression coefficients to be read as standardized effect sizes.
- Controlling for clustering was mostly done on the family level, because foster care children did not have information on enrollment in daycares. As a sensitivity check, an extra model was run for children not in foster care in which was controlled for daycare clusters.
- The basic set of control variables included the following: the pre-test scores of the outcome at hand, gender, age at pre-test and age at post-test. Pre-test scores were not included in models where posttest scores of print awareness and deletion scores were included because the estimator technique FIML would in that case estimate values that were originally not meant to be collected at all (i.e., some children were too young at pre-test for the print awareness and deletion tasks yet had post-test scores).
- The set of SES control variables included the following: immigrant status (immigrant, descendant or danish), mother’s education (low=primary school; low-mid=high school, vocational education; high-mid=professional BA; high=BA and advanced education), father’s education (low=primary school; low-mid=high school, vocational education; high-mid=professional BA; high=BA and advanced education), the log of household income, single parenthood, and home literacy environment (construct that contains items related to reading and book exposure in the home, created on the basis of a principal component analysis). For children in foster care, these SES variables were available for both their biological (see “Control SES bio. parents) and foster care parents (see “Control foster parents”). Home learning environment was only measured for the foster parents (see “Control foster care parents”).
- The set of social- and emotional difficulties and strengths variables included the following subscales of the Strengths and Difficulties Questionnaire (SDQ): Emotional Symptoms, Conduct problems, Hyperactivity/Inattention, Peer problems, and Prosocial, measured at pre-test.
- In addition, for the foster care children, there was an extra control variable available which was age of placement into foster care (see “Control age of placement”).
- Table abbreviations or symbols indicate the following: significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. FIML: Full Information Maximum Likelihood. Control: control variables. Famid: Family clusters, instid: daycare institute clusters.

Yes: [variable] included in the model. No: [variable] not included in the model.

- Columns marked in blue are considered the final models for the children in foster care the models in which both is controlled for the SES characteristics of the biological parents and the foster care parents. For children not in foster care the final models (also marked in blue) are the ones with all control variables and adjustment for clustering in families or daycare institutes.
- If there are exemptions from the decisions above then it is mentioned at the section for the specific research question.

5. Summary of findings

	<i>Children in foster care</i>	<i>Children not in foster care</i>
RQ1: Main effect?	Print awareness (+)	Deletion (-)
RQ2: Main effect moderated by child/parent char.?	Age of placement (+ but not robust), age (+), pre-test scores of rhyme/deletion/math vocabulary (+), emotional symptoms (-), bio father's education (+ but not robust), household income of biological family (-), foster mother's education (+)	Prosocial behavior (+), household income (-)
RQ3: Spill-over effects?	No significant effects	No significant effects
RQ4a: Correlations with intervention exposure?	No significant effects	Math vocabulary (+), rhyme (+)
RQ4b: Correlations moderated by child/parent char.?	Age (-)	Mother's/father's education (-)

Note. (+) = positive significant effect, (-) = negative significant effect. Not robust: effect was not found in the final models (marked in blue).

6. Findings per research question

6.1 To what extent does the READ intervention increase children's language and literacy skills for children in and out of foster care? (RQ1)

Decisions made additionally for these models:

- In models for children in foster care, also predictors (except treatment) were standardized on the whole sample in order to avoid numerical difficulties and convergence issues.

6.1.1 Foster care children

One positive effect of treatment compared to controls for print awareness.

Table 9. Intervention effects on print awareness for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H	Model I	Model J
Treatment	0.06 (0.17)	0.06 (0.17)	0.25 (0.13)	0.26 (0.13)	0.28* (0.14)	0.34* (0.15)	0.29* (0.14)	0.34* (0.15)	0.23 (0.13)	0.24 (0.14)
Constant	-0.34** (0.12)	-0.34** (0.11)	-0.74*** (0.10)	-0.74*** (0.10)	-0.89*** (0.23)	-0.88*** (0.27)	-0.84** (0.26)	-0.79** (0.30)	-0.61*** (0.18)	-0.53** (0.19)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	159	159	159	159	159	159	159	159	159
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control SES bio. parents	No	No	No	No	Yes	Yes	Yes	Yes	No	No
Control SES foster parents	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes	No	Yes
Observations (n)	177	177	177	177	177	177	177	177	177	177

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

6.1.2 Children not in foster care

One negative effect of treatment compared to controls on the deletion task.

Table 10. Intervention effects on deletion for children not in foster care

	Model A	Model B	Model C	Model D	Model E	Model F
Treatment	-0.18 (0.15)	-0.18 (0.15)	-0.21 (0.13)	-0.32* (0.13)	-0.33* (0.13)	-0.33** (0.11)
Constant	0.20 (0.11)	0.20* (0.10)	-2.83*** (0.51)	-2.96*** (0.74)	-2.79** (0.97)	-2.79** (0.90)
FIML	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	inst id
Clusters (n)	NA	188	188	188	188	93
Control child char.	No	No	Yes	Yes	Yes	Yes
Control SES	No	No	No	Yes	Yes	Yes
Control SDQ	No	No	No	No	Yes	Yes
Observations (n)	193	193	193	193	193	193

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

6.2 To what extent do children and parent characteristics moderate the READ intervention effect on primary outcomes? (RQ2)

Decisions made additionally for these models:

- In models with SDQ subscales as moderator, other SDQ subscales are not controlled for.

6.2.1 Foster care children

Age of placement. Age of placement was only a significant moderator when only controlling for foster care parents' SES and not also the biological parents' SES (see Model H and I). Models H and I indicate that the older the children are placed in foster care, the more they gained from the intervention concerning rhyme than children that were placed in foster care families at a younger age.

Table 11. Moderation effect of placement age on rhyme for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H	Model I
Treatment	-0.04 (0.16)	-0.04 (0.16)	0.05 (0.10)	0.02 (0.10)	0.06 (0.11)	0.02 (0.10)	0.06 (0.11)	0.07 (0.10)	0.10 (0.10)
Treatment*Age of placement	-0.07 (0.18)	-0.07 (0.16)	0.24 (0.12)	0.20 (0.12)	0.22 (0.11)	0.20 (0.12)	0.21 (0.11)	0.24* (0.12)	0.24* (0.12)
Age of placement	0.20 (0.14)	0.20 (0.13)	-0.04 (0.09)	-0.00 (0.09)	0.04 (0.10)	-0.01 (0.09)	0.05 (0.10)	-0.04 (0.09)	0.01 (0.10)
Constant	-0.34** (0.11)	-0.34** (0.12)	-0.23** (0.07)	-0.63*** (0.13)	-0.55*** (0.14)	-0.61*** (0.14)	-0.50** (0.16)	-0.26* (0.10)	-0.17 (0.12)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	208	208	208	208	208	208	208	208
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	No	No	No	No	No	No
Control SES bio. parents	No	No	No	Yes	Yes	Yes	Yes	No	No
Control SES foster parents	No	No	No	No	No	Yes	Yes	Yes	Yes
Control SDQ	No	No	No	No	Yes	No	Yes	No	Yes
Observations (n)	235	235	235	235	235	235	235	235	235

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Gender. No significant effects found.

Age (pre-test). Age of the child at pre-test moderated math vocabulary and print awareness. Older foster care children gained more in math vocabulary and print awareness from the intervention than younger children in foster care. For print awareness, the moderator was only significant when controlling only for the SES of biological parents.

Table 12. Moderation effect of age on math vocabulary for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H	Model I	Model J
Treatment	-0.07 (0.13)	-0.07 (0.13)	-0.06 (0.10)	-0.06 (0.10)	-0.08 (0.10)	-0.08 (0.11)	-0.09 (0.11)	-0.09 (0.11)	-0.06 (0.10)	-0.06 (0.11)
Treatment*Age at pre-test	0.15 (0.12)	0.15 (0.12)	0.20* (0.10)	0.20 (0.10)	0.22* (0.11)	0.24* (0.10)	0.22* (0.11)	0.24* (0.11)	0.22* (0.11)	0.23* (0.11)
Age at pre-test	0.62*** (0.09)	0.62*** (0.08)	-0.12 (0.19)	-0.11 (0.18)	-0.13 (0.20)	-0.13 (0.21)	-0.15 (0.21)	-0.14 (0.20)	-0.12 (0.19)	-0.15 (0.19)
Constant	-0.39*** (0.09)	-0.39*** (0.09)	-0.13 (0.07)	-0.13 (0.07)	-0.36 (0.21)	-0.45* (0.21)	-0.34 (0.20)	-0.42* (0.21)	-0.06 (0.09)	-0.09 (0.09)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	208	208	208	208	208	208	208	208	208
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes	No	No
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes	No	Yes
Observations (n)	235	235	235	235	235	235	235	235	235	235

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 13. Moderation effect of age on print awareness for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H	Model I	Model J
Treatment	0.11 (0.16)	0.11 (0.15)	0.04 (0.15)	0.03 (0.15)	0.04 (0.16)	0.12 (0.17)	0.05 (0.16)	0.14 (0.17)	0.03 (0.15)	0.08 (0.16)
Treatment*Age at pre-test	0.27 (0.16)	0.27* (0.14)	0.29* (0.14)	0.31* (0.14)	0.32* (0.15)	0.33* (0.15)	0.27 (0.17)	0.28 (0.16)	0.29 (0.16)	0.29 (0.15)
Age at pre-test	0.51*** (0.12)	0.51*** (0.09)	-0.21 (0.28)	-0.19 (0.28)	-0.26 (0.32)	-0.16 (0.32)	-0.27 (0.31)	-0.21 (0.32)	-0.37 (0.29)	-0.36 (0.30)
Constant	-0.64*** (0.12)	-0.64*** (0.10)	-0.26 (0.14)	-0.25 (0.13)	-0.27 (0.23)	-0.37 (0.26)	-0.17 (0.25)	-0.27 (0.28)	-0.06 (0.19)	-0.11 (0.20)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	159	159	159	159	159	159	159	159	159
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes	No	No
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes	No	Yes
Observations (n)	177	177	177	177	177	177	177	177	177	177

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Pre-test scores. For rhyme, deletion, and math vocabulary, pre-test scores of the children moderated the treatment effect. Children with higher pre-test scores benefitted more from the intervention. Note that the moderators pre-test score of rhyme and math vocabulary were only significant in one of the final models.

Table 14. Moderation effect of pre-test score of rhyme for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Treatment	0.05 (0.11)	0.05 (0.09)	0.11 (0.09)	0.11 (0.08)	0.08 (0.09)	0.09 (0.10)	0.09 (0.10)	0.08 (0.09)
Treatment*pre-test score of rhyme	0.07 (0.11)	0.07 (0.10)	0.16 (0.09)	0.17 (0.09)	0.18* (0.09)	0.14 (0.09)	0.13 (0.09)	0.18* (0.09)
Pre-test score of rhyme	0.14*** (0.01)	0.14*** (0.01)	0.10*** (0.02)	0.10*** (0.02)	0.10*** (0.01)	0.10*** (0.02)	0.10*** (0.02)	0.10*** (0.01)
Constant	-1.12*** (0.11)	-1.12*** (0.15)	-1.02*** (0.14)	-1.02*** (0.14)	-1.45*** (0.17)	-1.35*** (0.18)	-1.32*** (0.20)	-1.45*** (0.18)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	208	208	208	208	208	208	208
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	Yes	No
Observations (n)	235	235	235	235	235	235	235	235

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 15. Moderation effect of pre-test score of deletion for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Treatment	-0.12 (0.15)	-0.12 (0.14)	-0.03 (0.13)	-0.02 (0.13)	0.00 (0.13)	-0.08 (0.14)	-0.02 (0.13)	-0.11 (0.14)
Treatment*pre-test score of deletion	0.16 (0.17)	0.16 (0.14)	0.18 (0.15)	0.17 (0.15)	0.33* (0.16)	0.32 (0.16)	0.32* (0.15)	0.32* (0.16)
Pre-test score of deletion	0.12*** (0.03)	0.12*** (0.02)	0.09*** (0.02)	0.10*** (0.02)	0.09** (0.03)	0.09** (0.03)	0.09*** (0.03)	0.09** (0.03)
Constant	-0.38** (0.13)	-0.38** (0.13)	-0.49*** (0.13)	-0.51*** (0.13)	-0.54*** (0.15)	-0.64*** (0.17)	-0.61** (0.19)	-0.69*** (0.20)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	159	159	159	159	159	159	159
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes
Observations (n)	177	177	177	177	177	177	177	177

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 16. Moderation effect of pre-test score of math vocabulary for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Treatment	-0.02 (0.11)	-0.02 (0.09)	0.02 (0.08)	0.02 (0.08)	0.01 (0.09)	0.02 (0.09)	0.00 (0.09)	0.01 (0.10)
Treatment*pre-test score of math vocabulary	0.14 (0.09)	0.14 (0.10)	0.17 (0.10)	0.18 (0.10)	0.21* (0.10)	0.24* (0.10)	0.20 (0.10)	0.24* (0.10)
Pre-test score of math vocabulary	0.18*** (0.02)	0.18*** (0.01)	0.13*** (0.02)	0.13*** (0.02)	0.12*** (0.03)	0.12*** (0.03)	0.13*** (0.03)	0.13*** (0.03)
Constant	-2.07*** (0.19)	-2.07*** (0.18)	-1.68*** (0.22)	-1.68*** (0.22)	-1.80*** (0.27)	-1.94*** (0.30)	-1.84*** (0.27)	-1.97*** (0.31)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	208	208	208	208	208	208	208
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes
Observations (n)	235	235	235	235	235	235	235	235

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Socio-emotional skills. The treatment effect on print awareness was moderated by the pre-test scores of Emotional symptoms of the SDQ. Children with more emotional symptoms (e.g. often unhappy, downhearted) benefitted less from the intervention.

Table 17. Moderation effect of emotional symptoms on print awareness for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F
Treatment	0.19 (0.18)	0.19 (0.17)	0.31* (0.14)	0.31* (0.14)	0.42** (0.16)	0.42** (0.16)
Treatment*emotional symptoms	-0.16 (0.18)	-0.16 (0.15)	-0.10 (0.14)	-0.11 (0.14)	-0.36* (0.16)	-0.34* (0.16)
Emotional symptoms	0.14* (0.06)	0.14** (0.05)	0.06 (0.05)	0.06 (0.05)	0.14** (0.05)	0.13* (0.05)
Constant	-0.93** (0.29)	-0.93*** (0.21)	-0.96*** (0.20)	-0.96*** (0.21)	-1.60*** (0.39)	-1.52*** (0.42)
FIML	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	159	159	159	159	159
Control child char.	No	No	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes
Control SES foster care parents	No	No	No	No	No	Yes
Control SDQ	No	No	No	No	No	No
Observations (n)	177	177	177	177	177	177

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Biological mother's education. No significant effects found.

Biological father's education. Treatment effect was only moderated by biological father's education for deletion in two models (C and E). The interaction terms coefficient indicates that foster children with biological fathers that have higher education (> grundskole) benefitted more from the intervention.

Table 18. Moderation effect of biological father's education on deletion for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Treatment	-0.61 (0.41)	-0.61 (0.38)	-0.87* (0.37)	-0.86* (0.39)	-0.79* (0.36)	-0.63 (0.36)	-0.73 (0.38)	-0.56 (0.37)
Treatment*biological father's education	0.25 (0.28)	0.25 (0.25)	0.54* (0.26)	0.54 (0.28)	0.51* (0.25)	0.37 (0.23)	0.46 (0.26)	0.32 (0.24)
Biological father's education	0.13 (0.21)	0.13 (0.19)	-0.18 (0.21)	-0.18 (0.21)	-0.17 (0.21)	-0.11 (0.21)	-0.13 (0.23)	-0.04 (0.24)
Constant	0.11 (0.19)	0.11 (0.18)	-0.48* (0.22)	-0.48* (0.22)	-0.39 (0.26)	-0.34 (0.25)	-0.42 (0.27)	-0.33 (0.26)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	No	159	159	159	159	159	159	159
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes
Observations (n)	177	177	177	177	177	177	177	177

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Household income (biological family). Treatment effect on math vocabulary was significantly moderated by household income when not controlled for SDQ. Children from families that have lower incomes (< -0.8 SD) benefitted more from the intervention.

Table 19. Moderation effect of household income (biological family) on math vocabulary for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Treatment	-0.16 (0.19)	-0.16 (0.20)	-0.17 (0.12)	-0.18 (0.12)	-0.20 (0.13)	-0.19 (0.14)	-0.22 (0.13)	-0.21 (0.14)
Treatment*household income (biological family)	-0.02 (0.16)	-0.02 (0.17)	-0.23* (0.11)	-0.24* (0.11)	-0.24* (0.11)	-0.22 (0.13)	-0.25* (0.12)	-0.23 (0.14)
Household income (biological family)	0.17 (0.12)	0.17 (0.11)	0.11 (0.07)	0.12 (0.07)	0.12 (0.07)	0.11 (0.08)	0.13 (0.07)	0.12 (0.08)
Constant	-0.16 (0.14)	-0.16 (0.12)	-0.09 (0.08)	-0.09 (0.08)	-0.32 (0.20)	-0.40 (0.21)	-0.31 (0.18)	-0.38 (0.20)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	No	208	208	208	208	208	208	208
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	Yes	Yes
Control SES foster care parents	No	No	No	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes
Observations (n)	235	235	235	235	235	235	235	235

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Foster mother's education. The treatment effect on deletion was moderated by foster mother's education. The significant interaction term indicates that children with higher educated foster mothers benefited more from the intervention in terms of deletion skills.

Table 20. Moderation effect of foster care mother's education on deletion for foster care children

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Treatment	-1.29* (0.58)	-1.29* (0.54)	-0.84 (0.46)	-0.84 (0.46)	-0.97* (0.46)	-1.03* (0.48)	-0.96* (0.43)	-1.03* (0.44)
Treatment*foster mother's education	0.41 (0.23)	0.41 (0.21)	0.29 (0.18)	0.29 (0.18)	0.34 (0.18)	0.34 (0.18)	0.35* (0.17)	0.37* (0.17)
Foster mother's education	-0.09 (0.16)	-0.09 (0.17)	-0.08 (0.14)	-0.07 (0.14)	-0.13 (0.14)	-0.12 (0.15)	-0.15 (0.13)	-0.14 (0.14)
Constant	-0.03 (0.14)	-0.03 (0.14)	-0.35** (0.13)	-0.34** (0.13)	-0.38* (0.16)	-0.26 (0.18)	-0.39 (0.25)	-0.33 (0.25)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	159	159	159	159	159	159	159
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	No	No	Yes	Yes
Control SES foster care parents	No	No	No	No	Yes	Yes	Yes	Yes
Control SDQ	No	No	No	No	No	Yes	No	Yes
Observations (n)	177	177	177	177	177	177	177	177

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Foster father's education. No significant effects found.

Household income (foster care family). No significant effects found.

Home literacy environment of foster care family– book exposure. No significant effects.

6.2.2 Children not in foster care

Gender. No significant effects found.

Age. No significant effects found.

Pre-test scores. No significant effects found.

Socio-emotional skills. Treatment effect was moderated by prosocial behavior for deletion and print awareness, respectively. Children with more prosocial behavior (e.g., being more considerate of other people's feelings) benefitted more from the intervention.

Table 21. Moderation effect of pre-test score of prosocial behavior on print awareness for children not in foster care

	Model A	Model B	Model C	Model D	Model E
Treatment	-0.01 (0.14)	-0.01 (0.14)	-0.06 (0.12)	-0.13 (0.13)	-0.13 (0.14)
Treatment*Prosocial behavior	0.27 (0.17)	0.27 (0.15)	0.24 (0.12)	0.28* (0.13)	0.28* (0.12)
Prosocial behavior	-0.06 (0.10)	-0.06 (0.09)	-0.06 (0.07)	-0.10 (0.07)	-0.10 (0.07)
Constant	0.69 (0.71)	0.69 (0.64)	-2.59*** (0.67)	-1.85* (0.79)	-1.85* (0.84)
FIML	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	instid
Clusters (n)	NA	188	188	188	93
Control child char.	No	No	Yes	Yes	Yes
Control SES	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No
Observations (n)	193	193	193	193	193

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Mother's education. No significant effects found.

Father's education. No significant effects found.

Household income. Household income moderated the treatment effect on vocabulary. Children from families that have lower incomes benefitted more from the intervention.

Table 22. Moderation effects of household income on vocabulary for children not in foster care

	Model A	Model B	Model C	Model D	Model E	Model F
Treatment	0.15 (0.19)	0.15 (0.17)	0.14 (0.08)	0.09 (0.10)	0.14 (0.09)	0.14 (0.09)
Treatment*household income	-0.28 (0.28)	-0.28 (0.25)	-0.43*** (0.10)	-0.39*** (0.12)	-0.44*** (0.11)	-0.44*** (0.11)
Household income	0.04 (0.04)	0.04 (0.05)	0.03 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
Constant	-0.34 (0.48)	-0.34 (0.64)	-2.36*** (0.29)	-2.39*** (0.30)	-2.72*** (0.37)	-2.72*** (0.34)
FIML	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	inst id
Clusters (n)	NA	246	246	246	246	112
Control child char.	No	No	Yes	Yes	Yes	Yes
Control SES	No	No	No	Yes	Yes	Yes
Control SDQ	No	No	No	No	Yes	Yes
Observations (n)	260	260	260	260	260	260

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Home literacy environment – book exposure. No significant effects found.

6.3 To what extent can spill-over effects of the READ intervention be found on children's other cognitive skills and behavior? (RQ3)

Decisions made in addition/ specifically for these models:

- In models with SDQ subscales as outcomes (Y), SDQ is not controlled for.

6.3.1 Foster care children

One significant result was found of treatment on the SDQ impact score.

Table 23. Intervention effects on Impact (SDQ) for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G
Treatment	0.41* (0.17)	0.41* (0.18)	0.31* (0.15)	0.31* (0.15)	0.32* (0.15)	0.32* (0.14)	0.32* (0.15)
Constant	0.21 (0.12)	0.21 (0.11)	-0.04 (0.12)	-0.02 (0.12)	-0.28 (0.26)	-0.31 (0.27)	-0.04 (0.16)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	fam id	fam id
Clusters (n)	NA	208	208	208	208	208	208
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	Yes	Yes	No
Control SES foster care parents	No	No	No	No	No	Yes	Yes
Control SDQ	No	No	No	No	No	No	No
Observations (n)	235	235	235	235	235	235	235

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

6.3.2 Children not in foster care

No significant effects found.

6.4 To what extent is intervention exposure correlated with children's language and literacy skills for children in and out of foster care (RQ4a)?

Decisions made for specifically these models:

- Only intervention exposure was available of the treatment groups, thus no treatment-control comparisons were made.
- Intervention exposure: we have made a mean measure of amount of reading over 20 weeks¹, and standardized over the whole sample (children in and out of foster care together)
- If the reading variable had a missing value, it was changed to 0. Otherwise FIML would estimate those missing values. It was assumed that the value was missing because the parents did not read that week.
- SES¹: Does not include control variables immigrant status nor (single) parenthood because too few cases, makes convergence difficult. Neither does it contain home learning environment because intervention exposure (average reading) is a similar kind of proxy.

6.4.1 Children in foster care

No significant effects found.

6.4.2 Children not in foster care

Significant correlations were found between intervention exposure and rhyme and math vocabulary.

¹ The intervention was 22 weeks in the second round to compensate for the 2 weeks of Christmas holidays where most families would have less time for the intervention than normal.

Table 24. Correlation of intervention exposure with math vocabulary for children not in foster care

	Model A	Model B	Model C	Model D	Model E	Model F
Standardized values of (reading)	0.07 (0.07)	0.07 (0.07)	0.10* (0.05)	0.09* (0.04)	0.12* (0.05)	0.12* (0.05)
Constant	0.29*** (0.07)	0.29*** (0.08)	-2.13*** (0.46)	-3.59* (1.53)	-3.30* (1.48)	-3.30* (1.50)
FIML	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	inst id
Clusters (n)	NA	124	124	124	124	76
Control child char.	No	No	Yes	Yes	Yes	Yes
Control SES	No	No	No	Yes ¹	Yes ¹	Yes ¹
Control SDQ	No	No	No	No	Yes	Yes
Observations (n)	129	129	129	129	129	129

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

6.5 To what extent is the correlation of intervention exposure with primary outcomes moderated by child and parent characteristics (RQ4b)?

Decisions made for specifically these models:

- The following moderators were entered into the models: gender and age of child, foster care mother/father's education and household income.
- Intervention exposure: a measure was used of the average amount of reading over 20 weeks², and standardized over the whole sample
- SES control variables: Does not include control variables immigrant status, single parenthood and home literacy environment due to few cases making convergence difficult.

6.5.1 Children in foster care

Age showed to be a significant moderator, yet while coefficients were very small and only significant p-values were found in the last model (Model H) when controlled for SDQ. The negative coefficient of the interaction term intervention exposure*age indicates that when older children were read to in a higher extent, outcomes on vocabulary were lower than younger children that were read to in a higher extent.

² The intervention was 22 weeks in the second round to compensate for the 2 weeks of Christmas holidays where most families would have less time for the intervention than normal

Table 25. Moderated fidelity effects on vocabulary for children in foster care

	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H
Intervention exposure	-0.0207 (0.1050)	-0.0207 (0.0829)	-0.0201 (0.0683)	-0.0385 (0.0640)	-0.0417 (0.0651)	-0.0317 (0.0731)	-0.0539 (0.0619)	-0.0518 (0.0659)
Age at pre-test	0.5974*** (0.0834)	0.5974*** (0.0844)	0.1128 (0.3065)	0.1667 (0.3459)	0.1993 (0.3374)	0.1317 (0.3287)	0.0085 (0.3753)	-0.0075 (0.3911)
Intervention exposure*age at pre-test	-0.0801 (0.1129)	-0.0801 (0.0773)	-0.1605 (0.1008)	-0.1558 (0.0865)	-0.1661 (0.0899)	-0.1734 (0.0973)	-0.1663* (0.0799)	-0.1720* (0.0788)
Constant	-0.3308*** (0.0852)	-0.3308*** (0.0859)	-0.1167* (0.0574)	-0.1175* (0.0581)	-0.0237 (0.1033)	-1.4423*** (0.2109)	-1.4139*** (0.2873)	-1.3691*** (0.3076)
FIML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clusters (n)	NA	110	110	110	110	110	110	110
Control child char.	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Control age of placement	No	No	No	Yes	Yes	Yes	Yes	Yes
Control SES bio parents	No	No	No	No	No	No	Yes	Yes
Control SES foster care parents	No	No	No	No	Yes ¹	Yes ¹	Yes ¹	Yes ¹
Control SDQ	No	No	No	No	No	Yes	No	Yes
Observations (n)	117	117	117	117	117	117	117	117

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

6.5.2 Children not in foster care

Intervention exposure was significantly moderated by mother's education for print awareness. And father's education was a significant moderator in the model with math vocabulary as outcome. Both negative coefficients for the interaction terms in the models indicate that when children were read to more during the intervention and had a lower educated mother/father, this was correlated with higher outcomes on print awareness/math vocabulary, than children that were read to less and had a higher educated mother/father.

Table 26. Moderation effect of mother's education on print awareness for children not in foster care

	Model A	Model B	Model C	Model D	Model E	Model F
Intervention exposure	1.00* (0.49)	1.00* (0.41)	0.66 (0.42)	0.80 (0.41)	0.96* (0.44)	0.96* (0.46)
Mother's education	0.03 (0.13)	0.03 (0.12)	0.10 (0.14)	0.15 (0.13)	0.11 (0.13)	0.11 (0.14)
Intervention exposure*Mother's education	-0.32* (0.14)	-0.32** (0.12)	-0.20 (0.12)	-0.24* (0.12)	-0.28* (0.12)	-0.28* (0.13)
Constant	0.22 (0.43)	0.22 (0.42)	-3.47*** (0.99)	-3.58*** (0.89)	-3.69*** (1.07)	-3.69*** (1.21)
FIML	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	inst id
Clusters (n)	NA	96	96	96	96	61
Control child char.	No	No	Yes	Yes	Yes	Yes
Control SES	No	No	No	Yes ¹	Yes ¹	Yes ¹
Control SDQ	No	No	No	No	Yes	Yes
Observations (n)	98	98	98	98	98	98

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 27. Moderation effect of father's education on math vocabulary for children not in foster care

	Model A	Model B	Model C	Model D	Model E	Model F
Intervention exposure	0.67** (0.24)	0.67** (0.24)	0.44** (0.14)	0.38** (0.13)	0.37** (0.12)	0.37** (0.13)
Fathers' education	0.11 (0.08)	0.11 (0.07)	0.08 (0.06)	0.01 (0.04)	-0.01 (0.04)	-0.01 (0.04)
Intervention exposure * Father's education	-0.19** (0.07)	-0.19** (0.07)	-0.11** (0.04)	-0.09* (0.04)	-0.08* (0.04)	-0.08 (0.04)
Constant	-0.01 (0.24)	-0.01 (0.27)	-2.35*** (0.51)	-2.44** (0.80)	-2.13** (0.83)	-2.13* (0.85)
FIML	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	No	fam id	fam id	fam id	fam id	inst id
Clusters (n)	NA	124	124	124	124	76
Control child char.	No	No	Yes	Yes	Yes	Yes
Control SES	No	No	No	Yes ¹	Yes ¹	Yes ¹
Control SDQ	No	No	No	No	Yes	Yes
Observations (n)	129	129	129	129	129	129

Note. Standard errors in parentheses. Marked in blue is the model in which both is controlled for the SES characteristics of the biological parents and the foster care parents. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$