



Early Learning Initiative

National College of Ireland

Assessing the Effectiveness of a Prevention-Focused Programme: A Comparative Study against National Norms.

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GUI Conference 2023

*Supporting parents, communities and schools
in the education of children*



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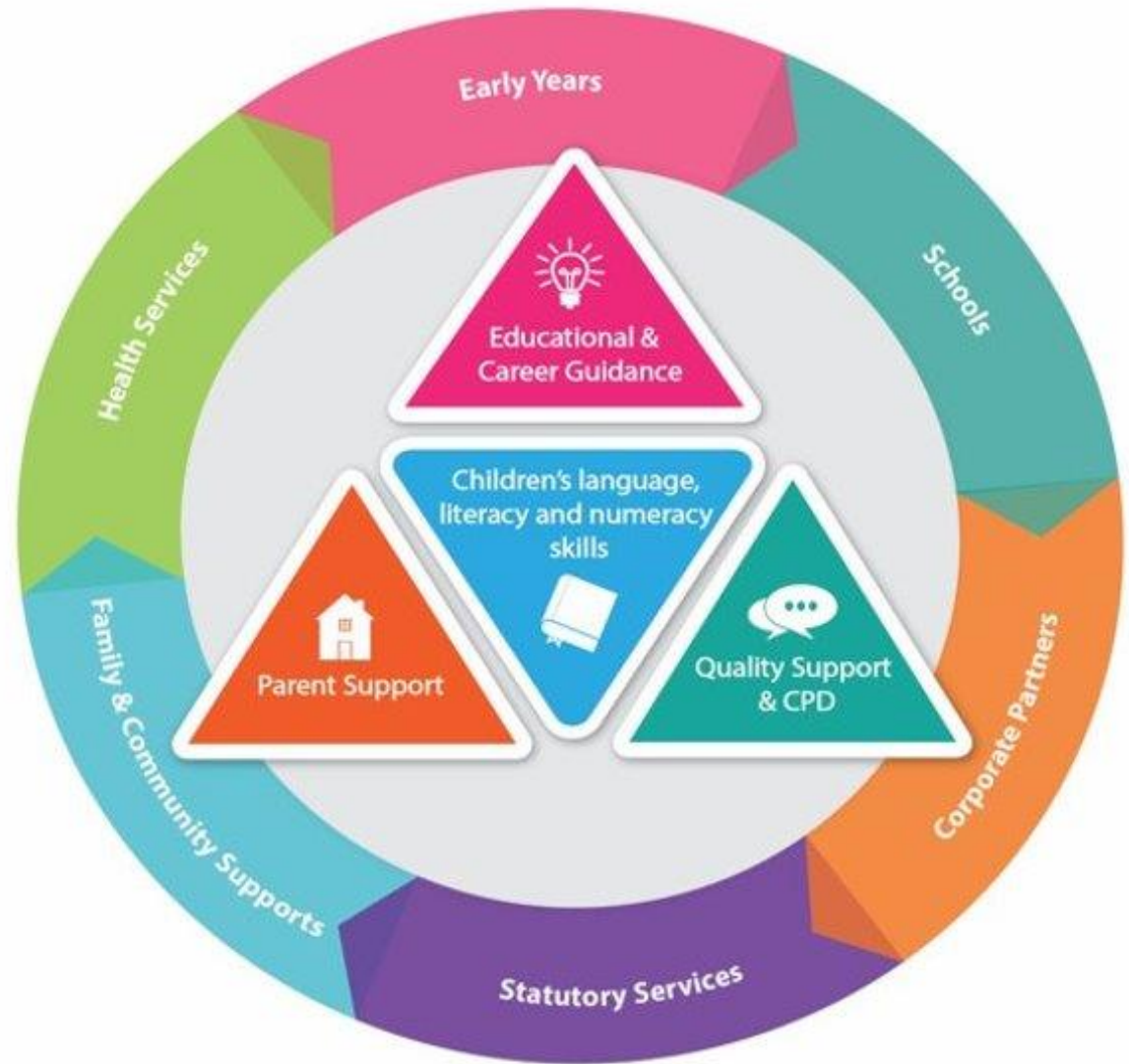
Early Learning Initiative
National College of Ireland

Working in partnership

to enable **children,
young people and
their families**

to develop the
**dispositions, skills
and knowledge**
needed

to achieve their
**educational,
career and life
goals**



0-2 Home Visiting Programme



Research Aims

- The primary aim of this project is to explore whether infants from an area of socio-economic disadvantage (“SED”) differ in terms of certain early developmental outcomes, as compared to national norms. It is hypothesised that the SED infants will demonstrate reduced outcomes in this respect when compared to their national counterparts.
- A secondary aim of this project is to explore whether an early intervention (“0-2 Years Programme”), delivered to the parents of the SED infants, succeeds in closing this disadvantage gap and brings the SED children’s development and wellbeing closer to national norms.

Participants

ELI Sample:

Parents/caregivers and their infants engaging in the 0-2 Home Visiting Programme.

GUI Sample:

Infants registered on the Child Benefit Register as having been born between 1st December 2007 and 30th June 2008. 11,134 families took part in the survey between September 2008 and March/April 2009 when their infant was 9 months of age.



Study Design

- Quantitative data was collected through online questionnaires pre-and post-programme.
- Most questions were modelled on measures used as part of the GUI study with the 9-month-old cohort. Draws from the three domains of child outcomes which form the focus of the GUI study, namely **physical health and development; social/emotional/behavioural wellbeing; educational achievement, intellectual capacity and cognitive development.**
- Participants were asked to provide information on the following:
 - **Family Demographics**
 - **Employment & Education of Parents/Caregivers**
 - **Support of parents by family and friends**
 - **Infant health and physical development /Infant hospital admissions/ Infant's sleep habits/Birth weight / Breastfeeding**
 - **Playing and Learning**

Analysis

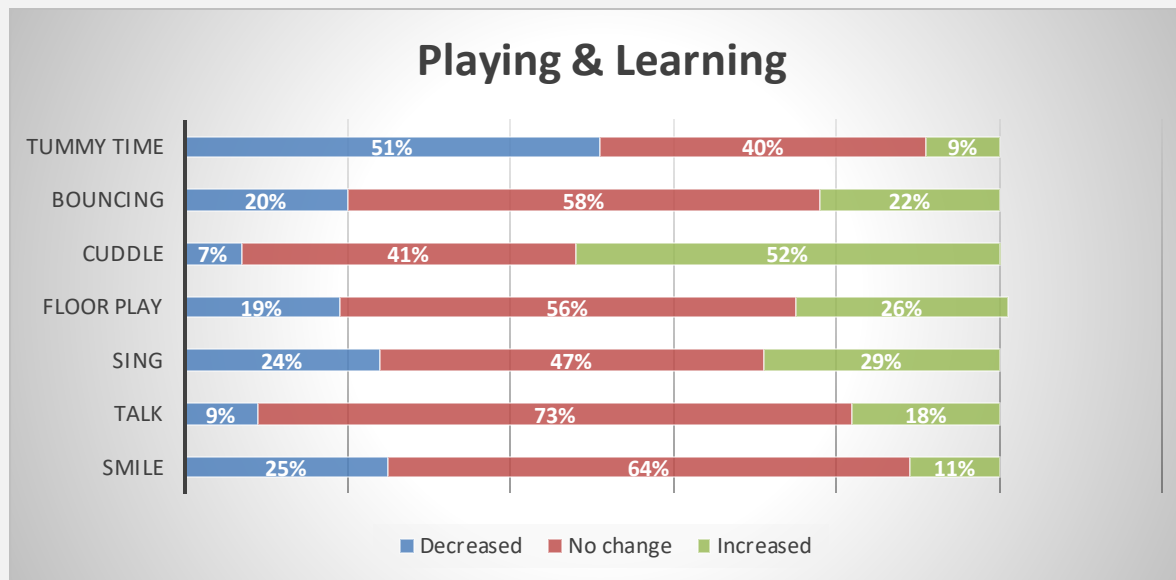
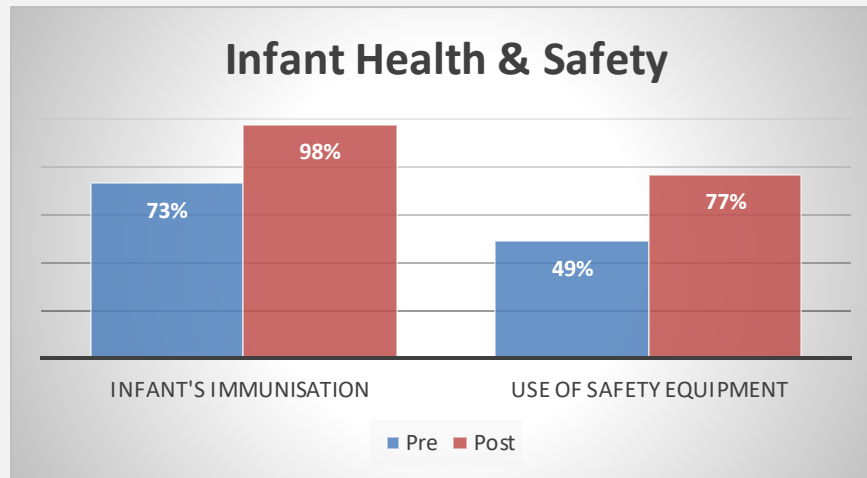
- Descriptive statistics were employed to provide a general description of the characteristics of the 0-2 families.
- We wanted to explore differences within the 0-2 Programme families at Time 1 and Time 2; group difference between the GUI families and the 0-2 Programme families at Time 1; group difference between the GUI families and the 0-2 Programme families at Time 2.
- Paired sample t-tests were conducted to compare different metrics of ELI's cohort pre- and post-intervention.
- Independent sample t-tests were conducted to compare different metrics of ELI's cohort pre- and post-intervention and the GUI's 9-month cohort data.

0-2 Family Demographics

	Parent/Caregiver Employment			Parent/Caregiver Education					Average age of infant		Gender of infant	
	Homemaker	Employed	Unemployed	Primary	Junior cert	Leaving cert	Primary degree	Postgrad studies	Pre-study (N=90)	Post-study (N=54)	Male	Female
%	36	47	16	2	8	21	24	45	-	-	48	46
months-	-	-	-	-	-	-	-	-	6.8	16.7	-	-



Findings: ELI Pre and Post Data Comparison



Findings: ELI Pre Data Compared to GUI 9 Month Data

Metric	M	SD	df	t	P	Cohen's d	95% CI
Partner Present in Home (Y/N) ELI (N=85)	.88	.32	11217	.12	.901		
GUI (N=11134)	.88	.33					
Caretaker Sleep (Hours) ELI (N=86)	6.6	1.35	11196	-5.06	<.001	-.55	-1.07, -.47
GUI (N=11112)	7.37	1.41					
Caretaker Health (5-Point Likert Scale: Excellent-Poor) ELI (N=86)	2.47	1.01	85.92	3.42	<.001	.44	.17, .64
GUI (N=11133)	2.07	.92					
Was baby ever breastfed? (Y/N) ELI (N=88)	1.26	.47	88.52	-2.71	.008	-.28	-.24, -.04
GUI (N=11131)	1.4	.49					
Breastfeeding at Time of Assessment (Y/N) ELI (N=67)	1.34	.48	66.8	-8.48	<.001	-1.35	-.61, -.38
GUI (N=6518)	1.84	.37					
How old when baby stopped being breastfed (Days) ELI (N=18)	520.83	430.51	17	4.31	<.001	6.43	223.5, 651.69
GUI (N=5116)	83.24	63.49					
Baby Regularly Eating Solid Food (Y/N) ELI (N=65)	1.68	2.85	64	1.9	.062		
GUI (N=10935)	1.01	.08					
How old was baby when regularly eating solid food (Days) ELI (N=49)	633.06	148.15	48.03	23.02	<.001	12.49	447.68, 533.38
GUI (N=10845)	142.53	38.1					
(Daytime) Hours Baby Sleeps ELI (N=82)	3.59	2.39	81.2	4.35	<.001	1.15	.62, 1.67
GUI (N=11125)	2.44	.98					
(Nighttime) Hours Baby Sleeps ELI (N=83)	9.61	2.24	82.5	-3.82	<.001	-.45	-1.43, -.45
GUI (N=11108)	10.55	1.44					
Waking Baby for Feeding at Night (3-Point Likert Scale: Usually, Sometimes, Not at all) ELI (N=86)	2.74	1.1	85.16	-1.48	.143		
GUI (N=11128)	2.91	.38					
Irritation from Baby Crying (5-Point Likert Scale: Never-Always) ELI (N=87)	2.79	1.06	86.92	7.17	<.001	.93	.59, 1.04
GUI (N=11130)	1.98	.87					
Baby Fully Vaccinated (Y/N) ELI (N=86)	.74	.44	85.51	3.7	<.001	.64	.43, .85
GUI (N=11134)	1.08	.27					
Hospitalized in the last year? (Y/N) ELI (N=53)	1.59	.5	84.59	-5.26	<.001	-.84	-.39, -.18
GUI (N=11129)	1.87	.36					
Baby's health at birth (4-Point Likert Scale) ELI (N=83)	1.3	.54	11209	1.03	.303		
GUI (N=11128)	1.24	.54					
Baby's current health (4-Point Likert Scale) ELI (N=86)	1.21	.41	11176	.55	.580		
GUI (N=11092)	1.18	.42					

Findings: ELI Pre Data Compared to GUI 9 Month Data



ELI cohort caregiver got on average **less sleep** (roughly 46 minutes less a night on average)



ELI cohort had higher overall rates of **breastfeeding** at time of data collection (ELI = 65.7% breastfeeding, GUI = 16%)



ELI cohort was also found to have higher rates of **infant hospitalizations** (ELI = 41.2% hospitalizations, GUI = 12.9%)



ELI cohort **caretaker health** was found on average worse (between very good and good, compared to very good in the 5-point Likert scale)



ELI cohort had lower rates of up-to-date **vaccinations**.

Findings: ELI Post Data Compared to GUI 9 Month Data

Metric	M	SD	df	t	P	Cohen's d	95% CI
Caretaker Sleep (Hours) ELI (N=54)	6.59	1.13	11164	-4.04	<.001	-.55	-1.15, -.4
GUI (N=11112)	7.37	1.41					
Caretaker Health (5-Point Likert Scale: Excellent–Poor) ELI (N=53)	2.6	1.03	11184	4.27	<.001	.59	.29, .79
GUI (N=11133)	2.07	.92					
Breastfeeding at Time of Assessment (Y/N) ELI (N=47)	1.36	.49	46.38	-6.74	>.001	-1.3	-.62, -.34
GUI (N=6518)	1.84	.37					
Baby Regularly Eating Solid Food (Y/N) ELI (N=52)	1.02	.14	51.16	.67	.508		
GUI (N=10935)	1.01	.08					
(Daytime) Hours Baby Sleeps ELI (N=53)	2.54	2.24	52.1	.33	.743		
GUI (N=11125)	2.44	.98					
(Nighttime) Hours Baby Sleeps ELI (N=54)	10.11	1.89	11176	.74	.459		
GUI (N=11108)	10.55	1.44					
Waking Baby for Feeding at Night (3-Point Likert Scale: Usually, Sometimes, Not at all) ELI (N=53)	2.77	.54	52.24	-1.87	.067		
GUI (N=11128)	2.91	.38					
Irritation from Baby Crying (5-Point Likert Scale: Never–Always) ELI (N=53)	2.6	1.18	52.27	3.85	<.001	.72	.3, .95
GUI (N=11130)	1.98	.87					
Baby Fully Vaccinated (Y/N) ELI (N=53)	1.04	.19	53	-1.61	.113		
GUI (N=11134)	1.08	.27					
Hospitalized in the last year? (Y/N) ELI (N=53)	1.64	.48	52.28	-3.45	.001	-.68	-.36, -.1
GUI (N=11129)	1.87	.36					
Baby's Current Health (Y/N) ELI (N=53)	1.23	.47	11143	.73	.466		
GUI (N=11129)	1.18	.42					

Findings: ELI Post Data Compared to GUI 9 Month Data



ELI cohort caregiver got on average **less sleep** (roughly 47 minutes less a night on average) (*Consistent pre and post*)



ELI cohort had higher overall rates of **breastfeeding** at time of data collection (ELI = 61.7% breastfeeding, GUI = 16%) (*Consistent pre and post*)



ELI cohort had higher rates of **infant hospitalizations** (ELI = 35.8% hospitalizations, GUI = 12.9%) (*Consistent pre and post*)



ELI cohort **caretaker health** was found on average worse (*Consistent pre and post*)



ELI cohort had higher rates of **vaccinations**. (ELI 74.4% vaccinations, GUI 12.9%) may be due to avg. age difference (ELI 6.8 mos vs GUI 9 mos), as post there was no significant difference.

Conclusion

The findings of this study highlight the need for support to families and infants in SED areas, as the 0-2 families scored below the national average in multiple indicators.

We observed the programme's ability to alter parental behavioural with their child and believe that with sustained intervention these may lead to changes in child development.

The findings have implications within policy as investments in early childhood interventions to help to enhance conditions for SED children in-turn improving social disadvantage

Lessons learned from this process will assist ELI in conducting future comparisons with GUI data.



Thank you!

Any questions?



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