

Evaluation of an intervention aimed at supporting new parents: the Baby Newsletter project

Costantino Panza, <u>Serena Broccoli</u>, Laura Bonvicini, Alessandro Volta, Maddalena Marchesi, Paolo Giorgi Rossi

Epidemiology Unit, AUSL di Reggio Emilia-IRCCS

Anticipatory guides in the first year of life as part of child care

- o Improving parents' knowledge about child development stages
- Supporting educational parents' skills to better develop children's abilities and competences

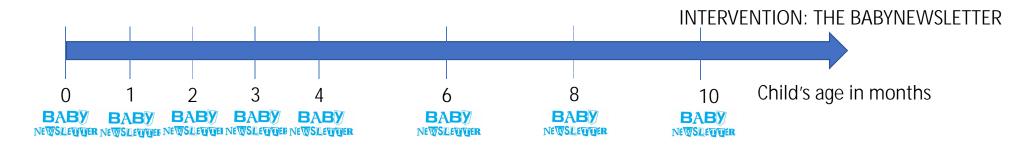


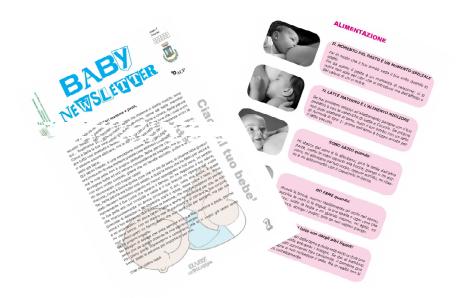
Objective of the evaluation study

To evaluate the efficacy of the Babynewsletter Project to support and improve parenting skills

Objectives of the intervention

- To improve parents' knowledge about child growth and development
- o To reduce disadvantages of the population groups at risk of low parenting skills
- o To promote participation in community activities





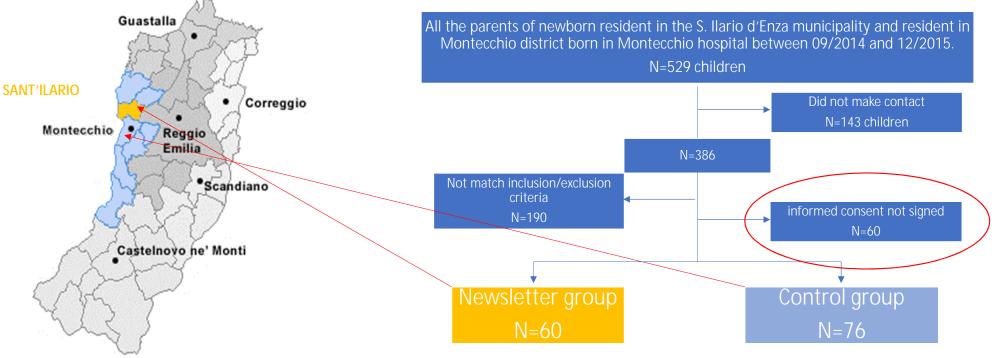
Newsletter contents:

1) educational-paeditric contents (EBM)

- Steps in child's development
- Parents' behaviors
- The parents' couple dynamics
- Insights for child safety
- Insights for family activities
- 2) community initiatives
- Information about community initiatives for families
- Information about the municipal library

3) synoptic table (A3 format) to attach with a recall with all the things "to do" with or for the child (0-3m; 3-6m; 6-9m; 9-12m)

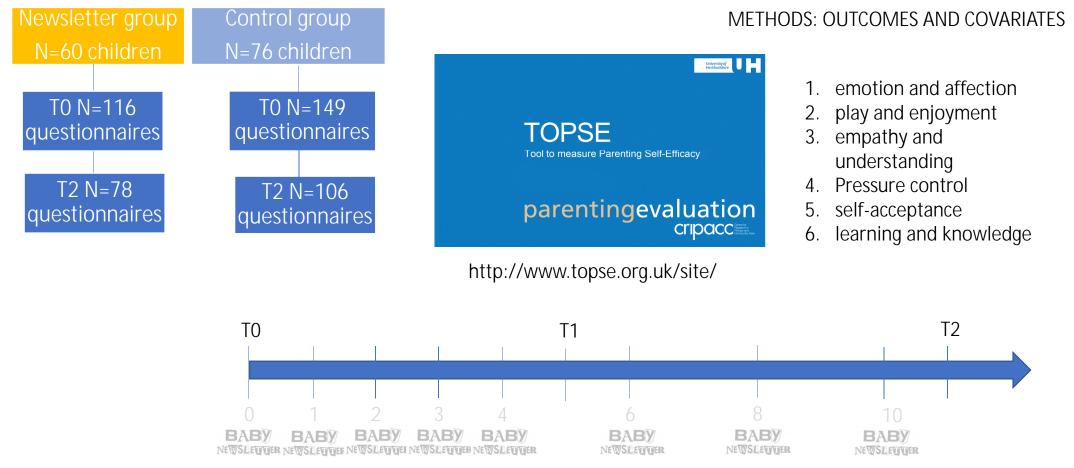
METHODS: STUDY DESIGN



Other inclusion criteria Having good comprehension of the Italian language

Exclusion criteria

delivering in other facilities than the Montecchio hospitals (only for controls) parents of newborns with pathological conditions at born parents of newborns that were transferred to another hospital immediately after born due to clinical reasons parents of pre-term newborns



Outcome Covariates

socioeconomic

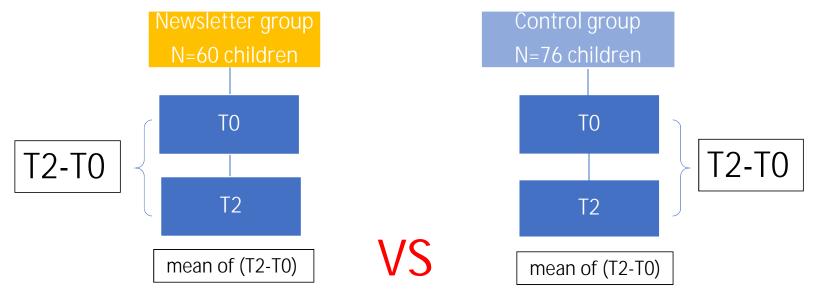
characteristics and HABITS QUESTIONNAIRE TOPSE

 TOPSE

 HABITS

QUESTIONNAIRE

METHODS: STATISTICAL ANALYSES



- 1. Individual parent was the unit of analysis (were considered as statistical units).
- 2. Individual changes were calculated as difference in TOPSE score between T2 and T0 in each group
- 3. "Difference in differences analysis": comparison of mean of individual changes between the two groups
- 4. Main analyses were adjusted by whether first born (yes/no), educational level of the parents, child sex. (Adjusted linear regression model)
- 5. Subgroup analyses have been conducted by first born and parent's educational level.

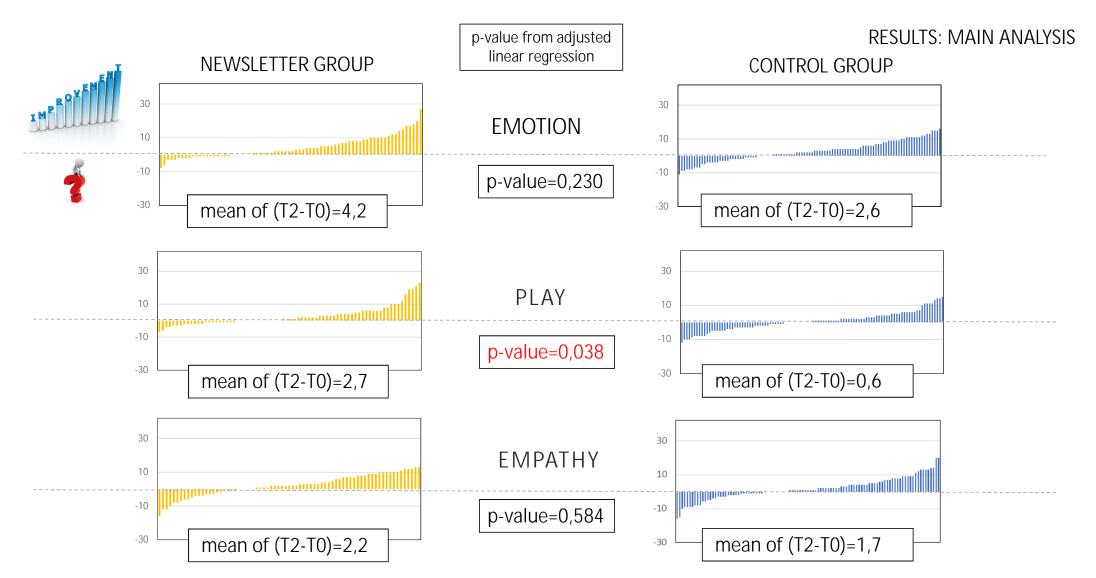
Newsletter and control groups are similar by sociodemographic characteristics and habits

Parenting dimensions: EMPATHY and PRESSURE CONTROL present some differences that have been taken into account in the statistical analyses

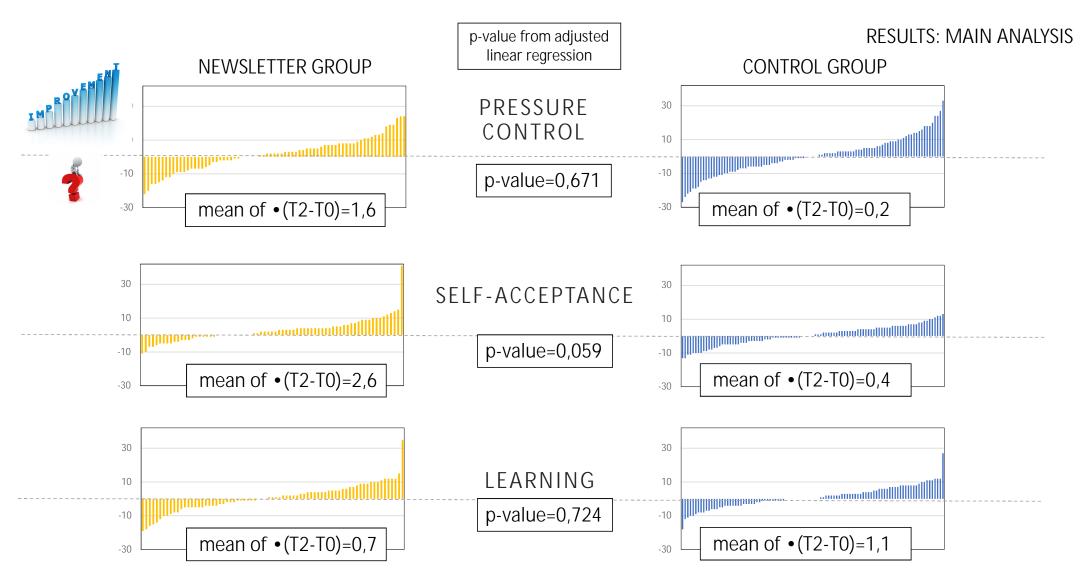
	Newsletter group		Control group	
	mean	95% CI	mean	95% CI
EMOTION	50.6	49.25; 52.03	50.8	49.83; 51.69
PLAY	53.2	51.88; 54.56	52.1	50.99; 53.22
EMPATHY*	50.6	49.16; 51.98	48.4	47.11; 49.66
PRESSURE CONTROL**	47.9	46.15; 49.69	42.6	40.86; 44.28
SELF-ACCEPTANCE	51.8	50.42; 53.10	51.0	50.07; 51.99
LEARNING	50.9	49.67; 52.21	49.3	48.22; 50.47

Mean of TOPSE score at baseline, by group

* t-test with p-value<0.05 ** t-test with p-value<0.0001



Distribution of individual changes expressed as difference in TOPSE score between T2 and T0, by domain



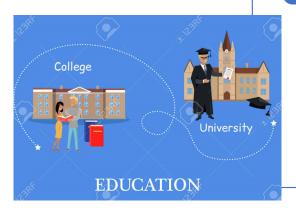
Distribution of individual changes expressed as difference in TOPSE score between T2 and T0, by domain

RESULTS: STRATIFYED ANALYSES

FIRSTBORN or SECOND-BORN

• The intervention has no effect on who has already a child.

PARENT'S EDUCATIONAL LEVEL



- The improvements are only for parents with high/medium educational level.
- For pressure control and emotions, the intervention had a negative effect on the parents with the lowest level of education.



- The intervention proved to be effective in increasing parenting skills for PLAY.
- Overall, all outcomes show a slightly more marked improvement in the Newsletter group compared to the control group, except for learning.
- The intervention has no effect on who has already a child.
- The efficacy of the intervention depends on the parent's educational level



THANK YOU

Serena Broccoli serena.broccoli@ausl.re.it