



Evidence and
Implementation
Summit 2023
9-11 October

Melbourne, Australia & Online



Behavioural and Implementation
Science Interventions
Yong Loo Lin School of Medicine



Centre for
Evidence and
Implementation

www.eisummit.org

[@EISSUMMIT2023](https://twitter.com/EISSUMMIT2023)

[#EIS2023](https://twitter.com/EISSUMMIT2023)

#369 - A cluster-randomised controlled trial of a multicomponent child development intervention in Vietnam

Presenting Author*

Professor David Hipgrave

Affiliation

National University of Singapore Saw Swee Hock School of Public Health
SingHealth Duke-NUS Global Health Institute

Country of residence

Singapore

Objectives

In line with the Summit theme of implementing evidence for impact, we conducted a two-arm cluster-randomised controlled trial to assess a “Learning Clubs” program (LCP) for early childhood development (ECD) in rural Vietnam. The objective was to assess the feasibility, effectiveness and cost-effectiveness of the approach, itself based on the known impact of individual ECD approaches, in this setting. The work also resonates with the Summit sub-themes on translation/adaptation of approaches, evaluating implementation and impact and on the evidence required for translation to policy.

Methods

The LCP comprised 19 facilitated group sessions from mid-pregnancy until the end of the first postpartum year, and one home visit within four weeks postpartum. It included diverse maternal, infant and domestic well-being components. Each group of 10-15 women met every 2-4 weeks, facilitated by trained local members of the Vietnam Women’s Union, sometimes with a supervised commune health worker and kindergarten teacher. Fathers and grandparents were encouraged to join. Posters and a family booklet were provided for discussion and on-going reference.

Participants were recruited in two stages. In the first, 84 communes were randomly selected by an independent statistician from the 112 communes in Ha Nam province. These were allocated randomly by the statistician to either the intervention or the control arm (42 communes each). In the second stage, all pregnant women of gestation <20 weeks, aged 18+ years, and living in the randomly selected communes were eligible to participate and invited to join the trial.



Evidence and
Implementation
Summit 2023
9-11 October

Melbourne, Australia & Online



Behavioural and Implementation
Science Interventions
Yong Loo Lin School of Medicine



Centre for
Evidence and
Implementation

www.eisummit.org

[@EISSUMMIT2023](https://twitter.com/EISSUMMIT2023)

[#EIS2023](https://twitter.com/EISSUMMIT2023)

Outcomes included: child health and cognitive, motor, language and social-emotional development domains, assessed by anthropometry and Bayley Scales of Infant and Toddler Development 3rd Ed. at birth and one and two years of age. Living circumstances and experiences were assessed during pregnancy and at 6, 12, and 24 months postpartum. These included household wealth; parents' education levels and occupations; quality of parent-parent relationship; maternal mental health, micronutrient deficiencies, and social capital; father's involvement and the home environment for ECD.

Main findings

The mean cognitive score of intervention children was 99.6 and control children 95.6, a significant difference with a moderate effect size (Cohen's $d=0.41$). Similar impacts were observed on motor and language domain scores.¹ Children from the lowest socioeconomic quintile, or whose mothers were the least educated had the greatest developmental benefits from their mothers' participation in the program.² The intervention was also cost-effective.³

Risks for all ECD domains were addressed through the LCP.¹ In late pregnancy more intervention arm women attended antenatal clinic and used micronutrient supplements. More of their newborns received breastmilk as the first food and were immunised. Six months postpartum, more of their babies were receiving cognitively stimulating care, including parents playing with them using homemade toys, and promoting social-emotional development. More intervention arm mothers were washing their hands with soap after using the toilet and changing the baby. At age 12 months, more intervention arm mothers were aware of babies' needs for sensitive feeding, adequate nutrition, sleep, physical activity, predictable routines of care and a clean home environment. More fathers were sharing household tasks and care of the baby. HOME Inventory⁴ assessments at age 2 years were significantly better in: parent responsiveness, availability of learning materials; sensitive parent interactions with the child; and variety of available activities in the intervention than the control group.¹

References

1. [https://doi.org/10.1016/S2352-4642\(23\)00032-9](https://doi.org/10.1016/S2352-4642(23)00032-9)
2. <https://doi.org/10.1093/heapol/czad057>
3. [https://doi.org/10.1016/S2214-109X\(23\)00271-1](https://doi.org/10.1016/S2214-109X(23)00271-1)
4. In <https://link.springer.com/book/10.1007/978-1-4899-0536-9>

www.eisummit.org