

Multidimensional Index for Child Growth and Development

Report Form 2020



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Task Force Chair/s

- Hinke Haisma, University of Groningen, Faculty Spatial Sciences, Population Research Centre, Netherlands;
- Gretel Pelto, Cornell University, Ithaca, USA;

Task Force Members

- Chumki Chakraborty, BRAC, Bangladesh;
- Enrica Chiappero-Martinetti - University of Pavia, Italy;
- Shirish Darak, Prayas Health Group, Pune, India;
- Zaina Mchome - National Institute for Medical Research, Mwanza, Tanzania;
- Sridhar Venkatapuram - King's College, London;
- Ali Dhansay - South African Medical Research Council and Stellenbosch University, Cape Town, South Africa (Council member)

Has your objective(s) as a task force been modified since the original proposal? Is so, please provide brief justification.

No

Have the activities to be undertaken been modified since the original proposal? If so, please provide brief overview and justification.

There have been no changes in activities undertaken.

Brief Overview of Activities since last annual report

The report is built around the objectives, as described in the proposal, namely:

- To serve as a platform for examining implications and activities of adopting a "capability approach to child growth", that includes discussion among scientists, health professionals, as well as with professionals from international organizations.

The IAEA/WHO/UNICEF symposium on "Understanding the double burden of malnutrition" in December 2018 has expanded and consolidated our research group, and has resulted in an increase of our knowledge base as well as steps made towards the implementation of our approach.

This year, the focus was on further operationalising the capability approach to child growth and develop a multi-dimensional index. It proved to be quite a challenge to find a postdoc with an econometrics background, and the skills to work in an interdisciplinary research group. Eventually, we appointed Rolando Gonzales Martinez from Bolivia for this task under the supervision of Prof Paul Anand. His contract is for 0.5 fte for the duration of 1 year, and started in October 2020. Rolando worked with Sabine Alkire on the Human Development Index in the past, and is familiar with the capability approach and how it can be operationalised. Despite the very short time we have been working with him, important progress has been made. We are expecting to publish several papers in 2021. Rolando's postdoc position is paid by the Dept of Demography, Faculty of Spatial Sciences, University of Groningen.

The chair was part of the external advisory group for the new UNICEF global nutrition strategy.

- To conduct research on the multiple dimensions of child growth in different countries (Bangladesh, Tanzania, India, Netherlands);

As a first research phase to develop a test of a capability measurement tool, we have developed studies in Bangladesh, Tanzania, India, Netherlands:

In 2020, Chumki Chakraborty and Zaina Mchome continued their PhD work in Bangladesh and Tanzania. In Bangladesh the focus is on capabilities for healthy child growth regions that are flooded a large part of the year. Chumki is a nutritionist, employed at the School of Public Health, BRAC University, and applies ethnographic methods to identify capabilities for healthy child growth. In Tanzania, Zaina also applied an ethnographic approach. She has a background as a sociologist and lived in a rural village in Morogoro to explore and understand local understandings of child growth. Zaina recently submitted her PhD thesis. Both candidates are expected to defend their PhD thesis in 2021.

Sepideh Yousefzadeh conducted an empirical analysis of the Indian DHS and continued working on that analysis and a publication is foreseen 2021. In the Netherlands we have applied the capability framework to understand feeding practices in a context with high levels of overweight and low socio-economic position. This work has recently been published by Social Science and Medicine.

Finally, a manuscript "Contextualising growth monitoring practices - comparing manuals from Tanzania, India, and the Netherlands" was shared with Ali Dhansay and Gretel Pelto for their feedback, and is ready for submission.

- To disseminate the findings from this research, and create a knowledge base;

Six publications were published:

Haisma Hinke, Pelto Gretel, Venkatapuram Sridhar, Yousefzadeh Sepideh, Kramer Lybrich, members of the Working Group "Towards a multi-dimensional index of child growth".

(2020) Towards a multi-dimensional index of child growth to combat the double burden of malnutrition. *Annals Nutrition Metabolism*;75:123–126.

Chakraborty Barnali, Yousefzadeh Sepideh, Darak Shrinivas, and Haisma Hinke (2020). "We struggle with the earth everyday": parents' perspectives on the capabilities for healthy child growth in haor region of Bangladesh. *BMC Public Health* 20: 140. <https://doi.org/10.1186/s12889-020-8196-9>

Mchome Zaina, Bailey Ajay, Kessy Flora, Darak Shrinivas, Haisma Hinke (2020). Postpartum sex taboos and child growth in Tanzania: implications for child care. *Maternal and Child Nutrition*. <https://doi.org/10.1111/mcn.13048>

Chakraborty, B.; Darak, S.; Haisma, H. (2020) Maternal and Child Survival in Haor Region in Bangladesh. An Analysis of Fathers' Capabilities to Save the Future. *Int. J. Environ. Res. Public Health*, 17(16), 5781. <https://www.mdpi.com/1660-4601/17/16/5781>

Mchome Zaina, Yousefzadeh Sepideh, Bailey Ajay, Haisma Hinke. (2020) "When I breastfeed, it feels as if my soul leaves the body": Maternal capabilities for healthy child growth in rural Southeastern Tanzania. *Int. J. Environ. Res. Public Health* 17(17), 6215; <https://doi.org/10.3390/ijerph17176215>

Visser Sanne and Haisma Hinke. (2021). Fulfilling food practices: Applying the capability approach to ethnographic research in the Northern Netherlands. *Social Science & Medicine* <https://doi.org/10.1016/j.socscimed.2021.113701> .

- To initiate the application of the capabilities approach for the development of interventions:

We have started the dialogue with Prof Sabine Faiz Rashid, dean of the School of Public Health, BRAC University, to explore funding possibilities to apply the capability framework for child growth as a tool to monitor the return of malnourished Rohingya child refugees to their homes after they have been re-nourished by UNICEF in the refugee camps.

This was suggested as a research idea by Dr. Victor Aguayo when we presented the approach at UNICEF HQ in September 2019.

We would also like to implement the survey questionnaire that we developed based on the capability framework for child growth to collect data that are contextually rich. Such data is currently lacking. Chumki Chakraborty, our task force member from BRAC University in Bangladesh could play a role here.

- To apply for funding to expand our efforts:

The above activity in Bangladesh requires funding and we are exploring possibilities. Our focus is to further develop the multi-dimensional index. We are expecting that this will increase our chances to obtain funding for implementation of our approach. We are considering Bill & Melinda Gates Foundation as a potential following step.

Please list any successes accomplished during this period (aligned with proposed measures of success from original proposal, or include justification for modifications)

This year has been very productive in terms of publications (six). The continuing interest by UNICEF in our approach is a major driver for our motivation and success.

Please mention your plans for the coming year and how they have been adapted based on success to date (if appropriate).

The focus will continue to be on operationalising and applying the approach. Again, our plans are presented in relation to the objectives as they are mentioned in the proposal (2017-2021):

1. To serve as a platform for discussion (see above)
2. Continuation of current activities in 2021. Focus on empirical analysis using the multi-dimensional index for child growth using Young Lives data and possibly MICS data bases.

3. To disseminate the findings from the research.
4. Expand knowledge base.
5. Present the multi-dimensional index for child growth at UNICEF HQ .
6. Several papers are in the pipeline/ two PhD defences are foreseen for 2021;
The Task Force will organise a symposium at the ICN in Tokyo in September 2021;
The Task Force will also present ASN in June 2021 (online).
7. Start applying the approach to the development of interventions;
8. Apply the capability framework for child growth as an analytical frame to monitor child Rohingya refugees when they return to their homes after having been re-nourished by UNICEF in the refugee camps. This will help to understand why these children became malnourished and how this could be prevented, i.e. what would be needed in terms of interventions.
9. Apply for funding to expand our efforts requires continuing attention.