

# **SCHOOLS AND CHILDCARE CENTERS AS SETTINGS FOR PROMOTING HEALTHY LIFESTYLES: LESSONS LEARNED AND WHAT'S NEXT?**

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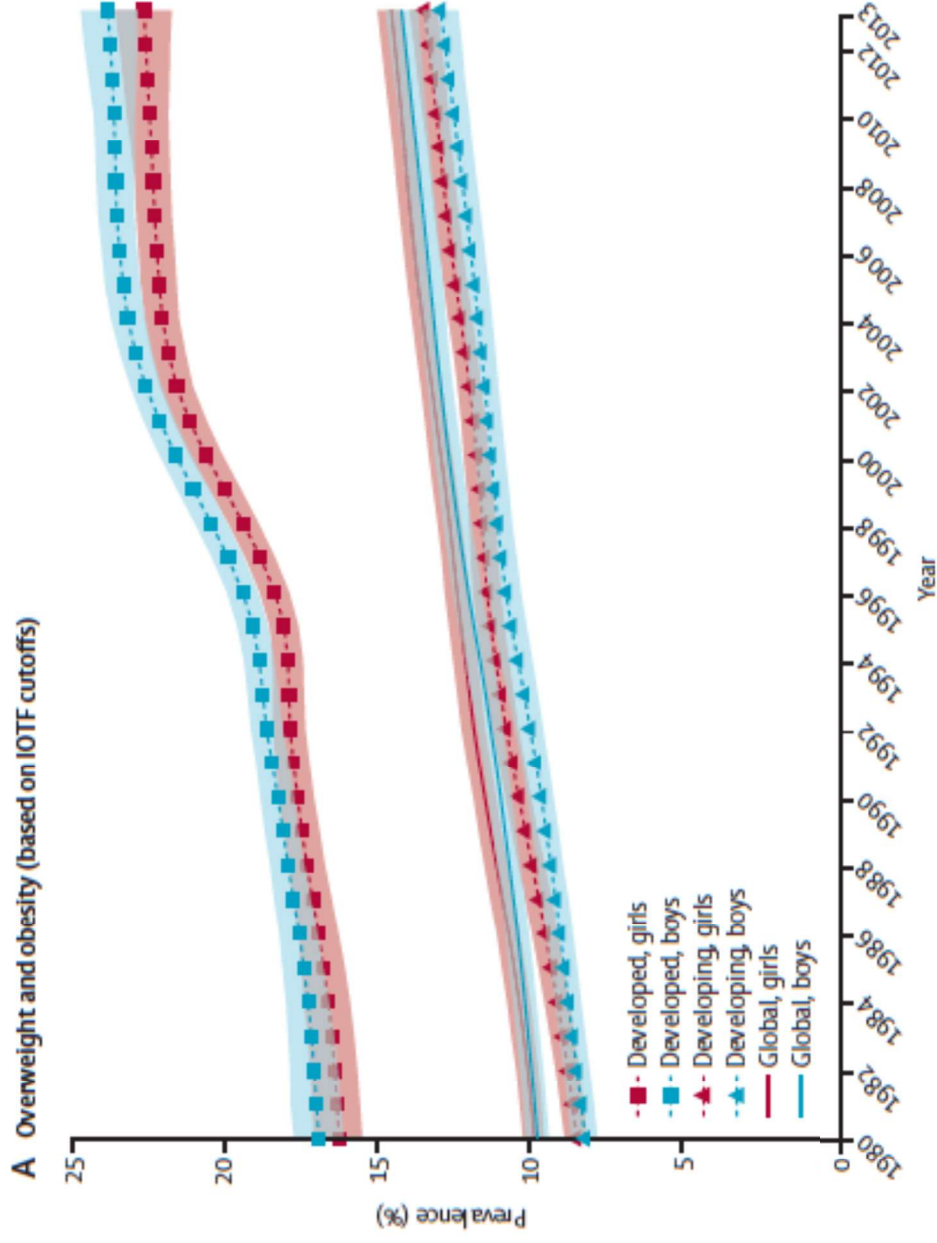
ReseArch Unit in Health Sciences: Nursing, Coimbra School of Nursing  
Research Center in Child Studies

19th June 2019

# Key messages

- Overweight and obesity with a past, present and future.
- Opportunities to implement intervention programs.
- Lessons learned from an intervention program implemented in schools.
- What's next? **Healthy children 2021.**

# Overweight and obesity



# Overweight and obesity in Portugal

	Crianças (<10 anos)		Adolescentes (10-17 anos)	
	Feminino	Masculino	Feminino	Masculino
<b>Obesidade</b>				
n ponderado	75.817	31.465	24.319	50.087
prevalência ponderada	6,9%	8,5%	5,9%	11,4%
IC 95%	[2,8-11,1]	[4,7-12,4]	[3,1-8,8]	[5,7-17,0]
<b>Pré-obesidade</b>				
n ponderado	69.874	67.199	89.365	111.194
prevalência ponderada	18,7%	15,9%	21,7%	25,3%
IC 95%	[13,7-23,8]	[11,4-20,4]	[16,3-27,1]	[18,7-31,8]



# THE LANCET



Milken Institute School  
of Public Health  
THE GEORGE WASHINGTON UNIVERSITY

## The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report

Boyd A Swinburn, Vivica I Kraak, Steven Allender, Vincent J Atkins, Phillip J Baker, Jessica R Bogard, Hannah Brinsden, Alejandro Calvillo, Olivier De Schutter, Raji Devarajan, Mujid Ezzati, Sharon Fried, Shifalika Goenka, Ross A Hammond, Gerard Hastings, Corinna Hawkes, Mario Herrera, Peter S Hourmand, Mark Howden, Lindsay M Isaacs, Aritadne B Kapetanaki, Matt Kasman, Harriet V Kuhnlein, Shiriki K Kumanyika, Bagher Larjani, Tim Lobstein, Michael W Long, Victor K R Matsudo, Susanna D H Mills, Gareth Morgan, Alexandra Morshed, Patricia M Nece, An Pan, David W Patterson, Gary Sacks, Meera Shekar, Geoff L Simmons, Warren Smt, Ali Tootee, Stefanie Vandevijvere, Wilma E Waterlander, Luke Wolfenden, William H Dietz



Photo, Beira – Mozambique, 2019

“Insanity is doing the same thing over and over again,  
expecting different results.”

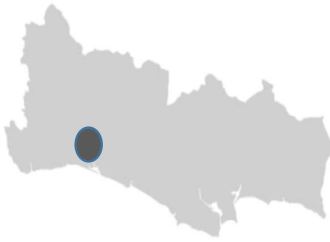
Einstein

# Children and school

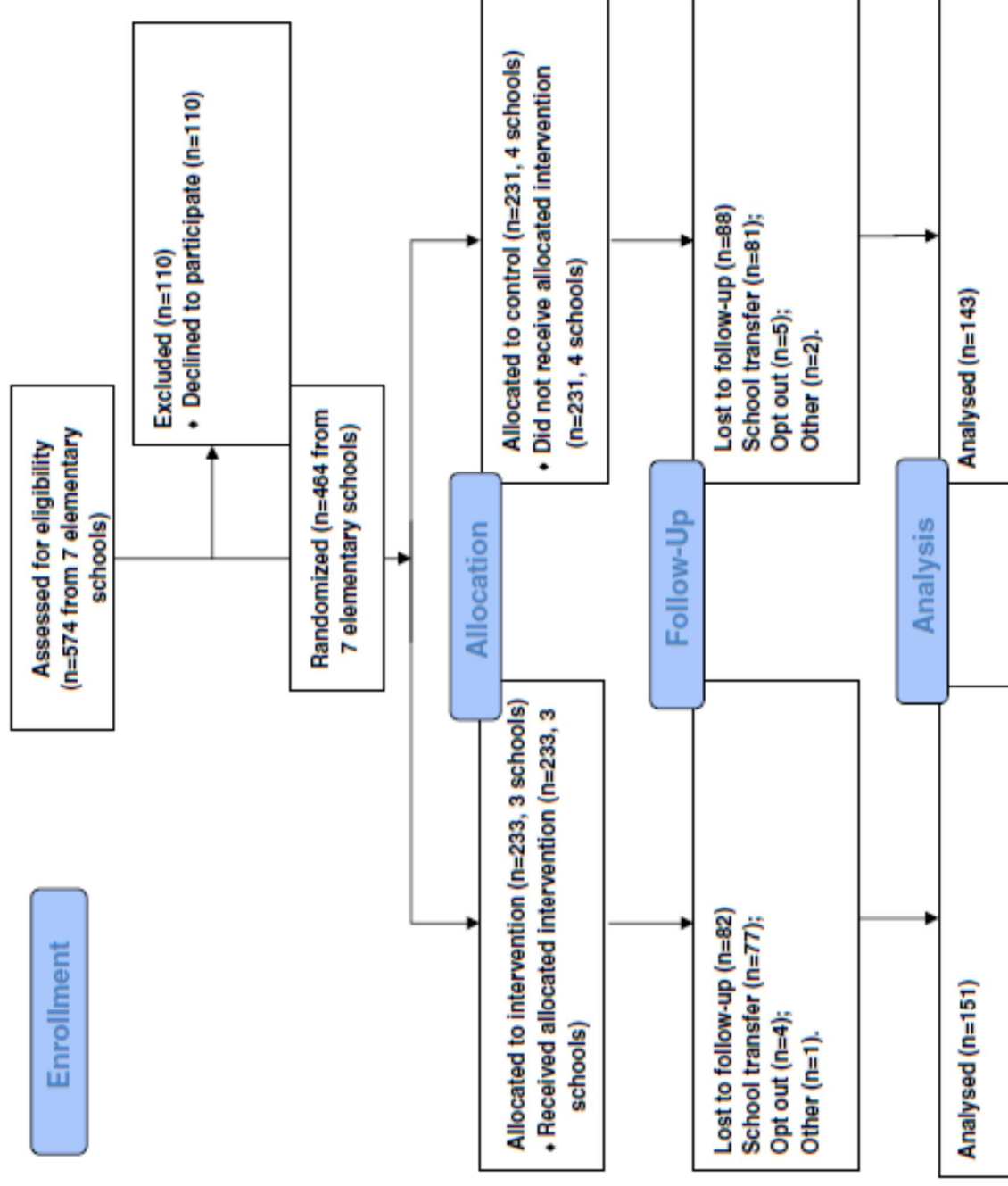




# Health promotion in schools



# Methods



# Data collection

Anthropometry

24h dietary recall

Physical Activity  
Index

Sociodemographic

# Intervention program: teachers

## Sessions and Description of the Attendance Phase During the Intervention Program

<i>Session Title</i>	<i>Description</i>
1. Incorporating characteristics of health promotion	This session focused on health promotion and overweight and obesity prevention. It focused on lifestyle determinants of health and obesity—definitions and descriptions of the problem, risk factors, and health problems.
2. Incorporating key concepts	This session provided an overview of food and nutrition concepts.
3. Development of appropriate guidelines: meeting children's needs	This session documented the dietary guidelines (the Portuguese Food Wheel) and healthy eating advice for children, covering the five main food groups. Participants explored resources and guidelines related to food and nutrition needs for children.

# Resultados

*Research Article*

## The Impact of an Intervention Taught by Trained Teachers on Childhood Fruit and Vegetable Intake: A Randomized Trial

Rafaela Rosário,<sup>1,2</sup> Ana Araújo,<sup>2</sup> Bruno Oliveira,<sup>3</sup> Patrícia Padrão,<sup>3</sup> Oscar Lopes,<sup>4</sup> Vítor Teixeira,<sup>3</sup> André Moreira,<sup>5</sup> Renata Barros,<sup>3</sup> Beatriz Pereira,<sup>2</sup> and Pedro Moreira<sup>3,6</sup>

*Article*

## The Impact of an Intervention Taught by Trained Teachers on Childhood Overweight

Rafaela Rosário<sup>1,2,\*</sup>, Bruno Oliveira<sup>3</sup>, Ana Araújo<sup>2</sup>, Oscar Lopes<sup>4</sup>, Patrícia Padrão<sup>3</sup>, André Moreira<sup>5</sup>, Vítor Teixeira<sup>3</sup>, Renata Barros<sup>3</sup>, Beatriz Pereira<sup>2</sup> and Pedro Moreira<sup>3,6</sup>

## Impact of a school-based intervention to promote fruit intake: a cluster randomized controlled trial

R. Rosário<sup>a,b,\*</sup>, A. Araújo<sup>c</sup>, P. Padrão<sup>c</sup>, O. Lopes<sup>d</sup>, A. Moreira<sup>e</sup>, S. Abreu<sup>f</sup>, S. Vale<sup>f</sup>, B. Pereira<sup>b</sup>, P. Moreira<sup>c,f</sup>

Impact of an intervention through teachers to prevent consumption of low nutrition, energy-dense foods and beverages: A randomized trial<sup>☆</sup>

Rafaela Rosário<sup>a,b,\*</sup>, Ana Araújo<sup>b</sup>, Bruno Oliveira<sup>c</sup>, Patrícia Padrão<sup>c,d</sup>, Oscar Lopes<sup>e</sup>, Vítor Teixeira<sup>c,f</sup>, André Moreira<sup>g</sup>, Renata Barros<sup>c</sup>, Beatriz Pereira<sup>b</sup>, Pedro Moreira<sup>c,d,f</sup>

## Health Promotion Intervention to Improve Diet Quality in Children: A Randomized Trial

Rafaela Rosário, PhD<sup>1</sup>  
Ana Araújo, MSc<sup>2</sup>  
Patrícia Padrão, PhD<sup>2</sup>  
Oscar Lopes, MSc<sup>3</sup>  
André Moreira, PhD<sup>2</sup>  
Beatriz Pereira, PhD<sup>1</sup>  
Pedro Moreira, PhD<sup>2</sup>

# Lessons learned

- Multi-actor approach;
- Bottom-up action;
- Relationship between the researchers and teachers based on trust;
- The support of models and theories of behavior change allows decision-making throughout the research;
- Scholarship of teaching and learning

# What's next?

## Gulbenkian academies of knowledge

2018-2021



Rafaela Rosário, PhD  
Cláudia Augusto, PhD  
Maria José Silva, MSc  
Luís Lopes, PhD  
Eduarda Sá, PhD Research Fellow  
Rute Santos, PhD

# Healthy children 2021

- **Aim:** analyse the impact of an intervention program, based on healthy lifestyles, on emotional, social and cognitive development , along with dietary intake, sleep, sedentary behavior and physical activity among children **12-42 months of age.**
- Cluster randomized trial in childcare centers

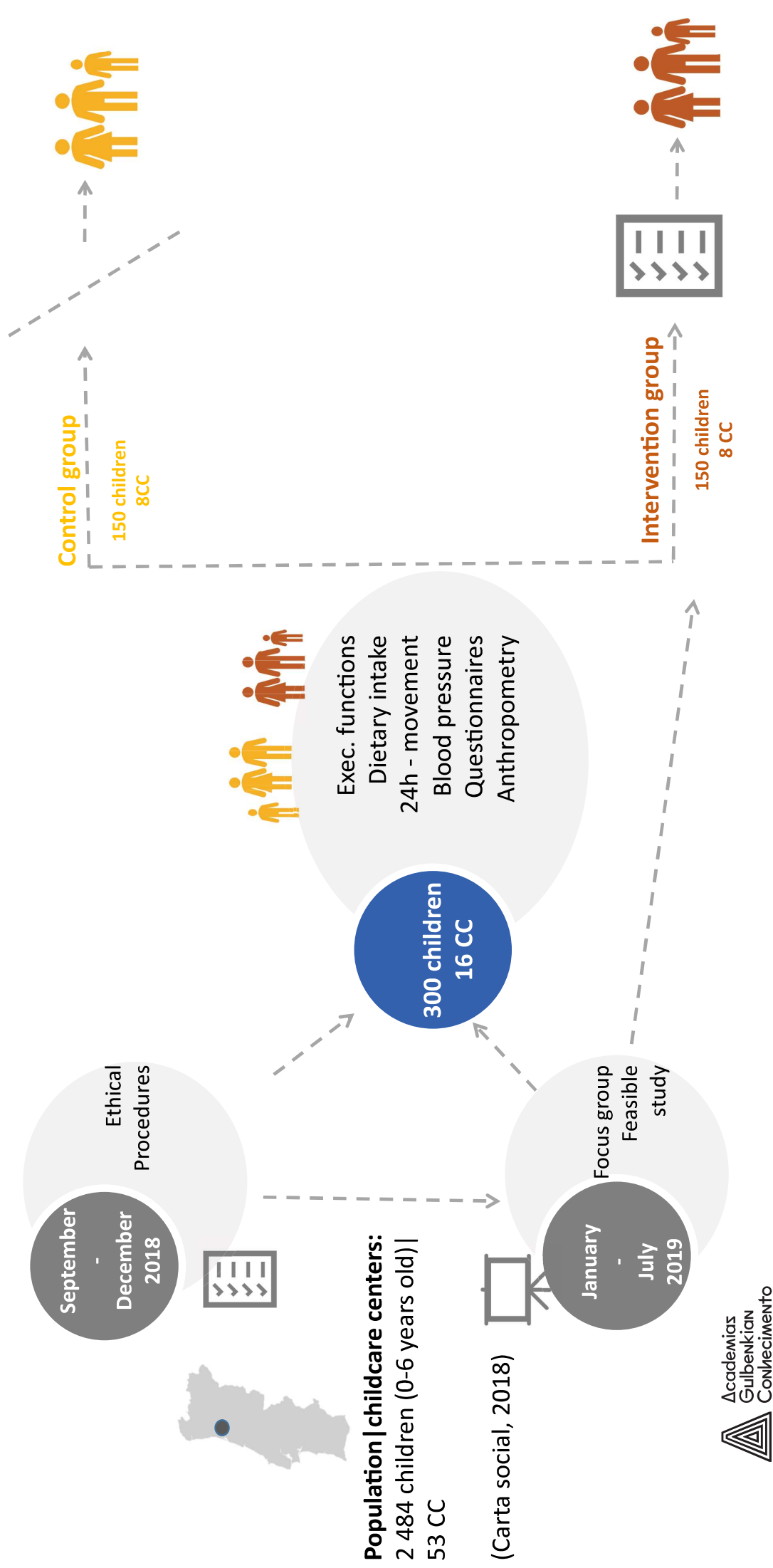


### Baseline assessment

Sep- December 2019

### Follow-up assessment

April- July 2020





# Intervention program

January - May 2019

Multi-actor  
approach e  
bottom up

Focus group

June - July 2019

Feasibility  
study

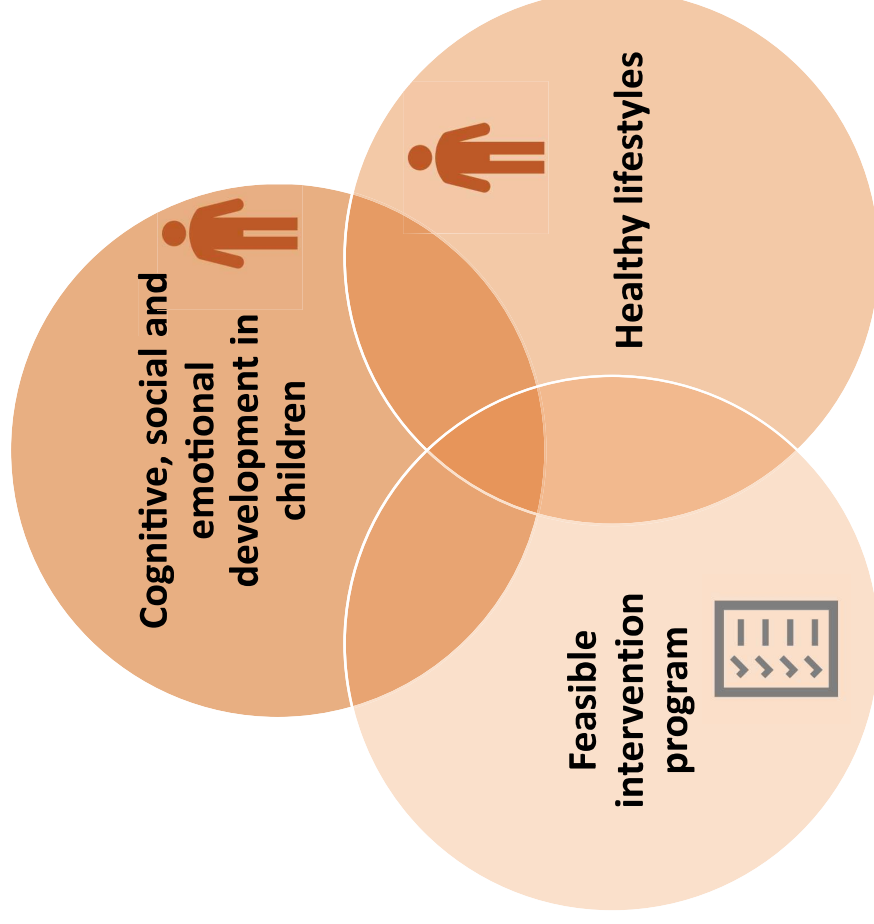
Sample out of  
the trial (Tools  
and program)

December 2019-July 2020

Implementation  
of the program

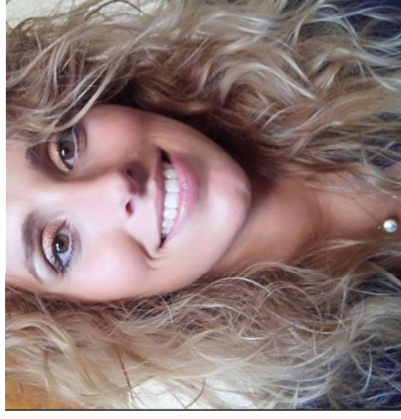
24 weeks  
Education/  
training+  
intervention

# Expected results





**Rute Santos**



**Eduarda Sousa-Sá**



**Maria J Silva**



**Luis Lopes**



**Claudia Oliveira**



**Pedro Moreira**



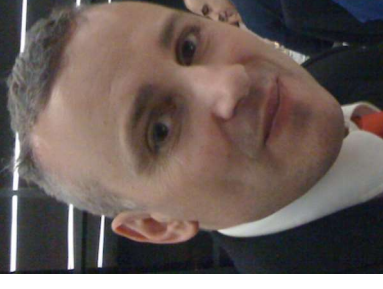
**Beatriz Pereira**



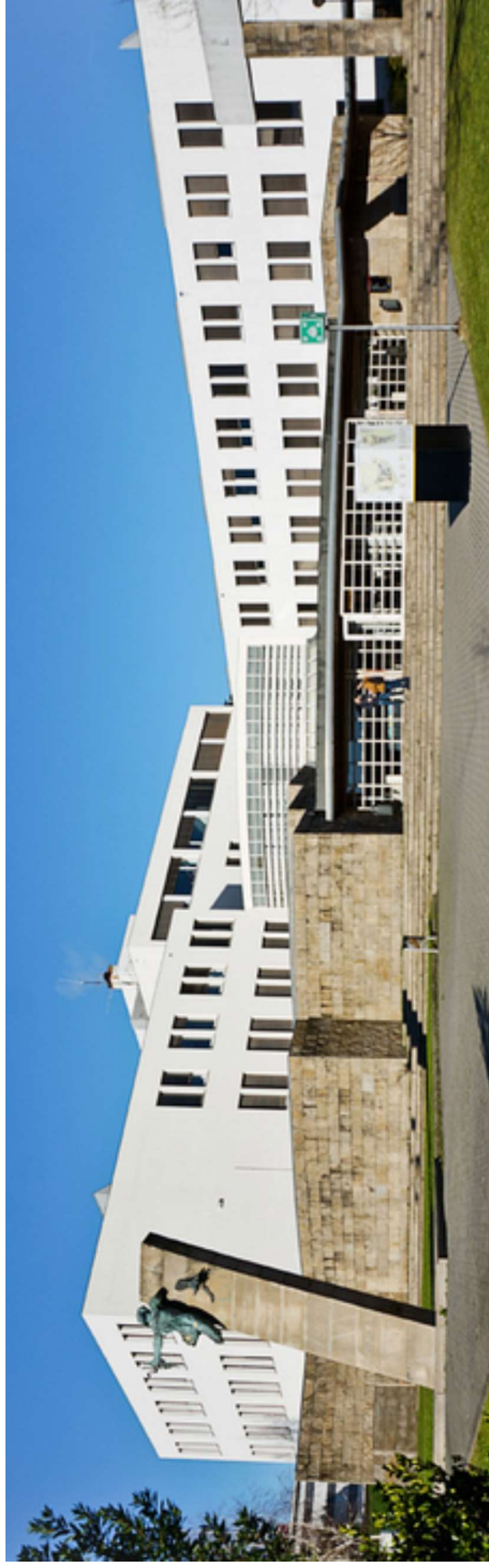
**Rafaela Rosário**



**Patrícia Padrão**



**Oscar Lopes**



Obrigada!

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