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MÜNSTER

The role of teachers in fostering transformational change towards lowemission and climate-resilient development

Dr. Marie-Christine Ghanbari



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**VARKEY
TEACHER**
AMBASSADORS PROGRAMME

 institut für
sportwissenschaft



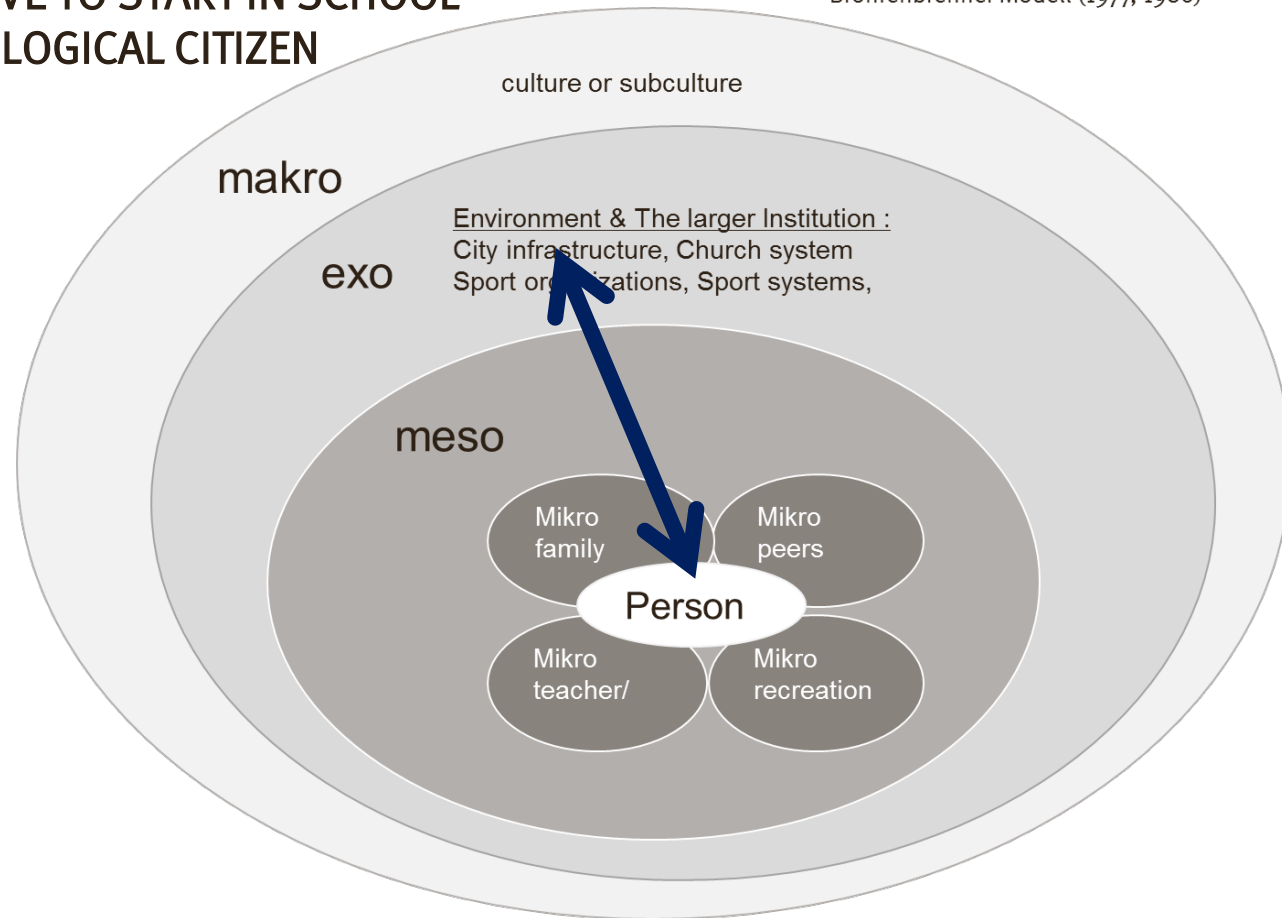
Building bridges to create global and ecological citizen

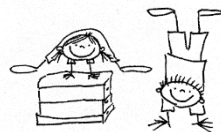
1. CHILDREN AS AGENTS OF CHANGE



2. USING EMPIRICAL RESEARCH TO GET AN UNDERSTANDING WHY WE HAVE TO START IN SCHOOL TO CREATE RESPONSIBLE ECOLOGICAL CITIZEN

Bronfenbrenner Modell (1977, 1986)





self-determined action in cooperative learning forms

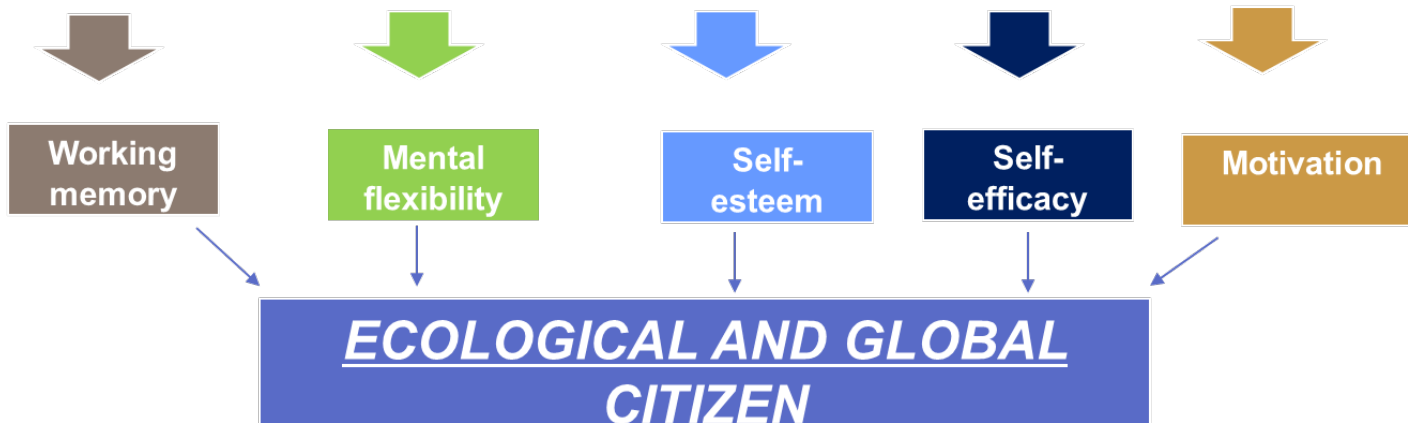
belonging

participation

recognition

responsibility

3. USING ACTION-ORIENTED AND COOPERATIVE LEARNING METHODS



The students positive success and autonomy experiences lead to higher self-efficacy and has a positive impact on the self-concept. Cooperative and self-determined learning enables students to learn democracy, ecological responsible and get confident in its own competence



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We need action-oriented and
cooperative learning to cover three
board areas



Climate science

why is the climate is
changing?

Mitigation

how can we try to
manage the change
and reverse it?

Adaptation

how will we need to
adapt to its impacts?





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Building roadmaps of
action
Hands-on knowledge



TAKING OVER RESPONSIBILITY IN SCHOOL

- CLEANING THE SCHOOLYARD AND CLASS
- RECYCLING PROJECTS
- UPCYCLING – BEING CREATIVE



Upcycling Ideen Nähen



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Interdisciplinary Teaching

- USING UPCYCLING TO MAKE THEIR OWN FITNESS EQUIPMENT IN PHYSICAL EDUCATION CLASS
- PROJECT BASED LEARNING IN THE LOCAL AREA – CLEAN CITY



4. Hands-on knowledge
BUILDING ROADMAPS OF ACTION

Das Stuhlspiel

Mit dem Stuhlspiel kannst du erkennen, wer auf der Welt viel und wer wenig zum Ausfall von CO₂ und damit zur Klimaerwärmung beiträgt.

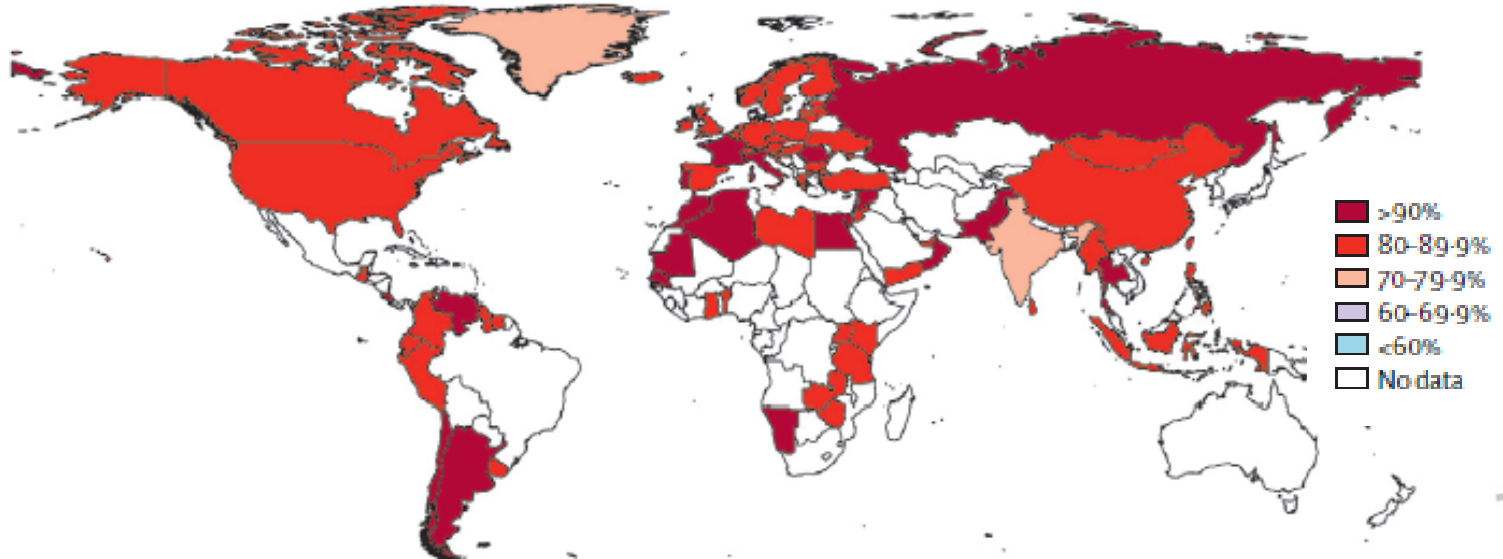
Bevölkerung (in Tausend)	Anzahl der Schüler	CO ₂ ausstoß (in Tausend)	Anzahl der Stühle
Welt: 100	100	Welt: 100	100
Asien: 36	36	Asien: 36	36
USA: 28	28	USA: 28	28
China: 19	19	China: 22	22
Indien: 16	16	Indien: 4	4
Europa: 10	10	Europa: 24	24



Ein anderer Ort, ein anderes Klima



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5. *ENHANCING AN ACTIVE AND PHYSICAL LIFESTYLE CAN REDUCE THE AIR POLLUTION*

TO BE PHYSICALLY ACTIVE IN ADULthood WE NEED TO BE PHYSICALLY ACTIVE IN CHILDHOOD.



1. AGENTS OF CHANGE

2. USING EMPIRICAL RESEARCH

3. ACTION-ORIENTED AND COOPERATIVE LEARNING

*4. HANDS-ON KNOWLEDGE
BUILDING ROADMAPS OF ACTION*

5. ACTIVE AND PHYSICAL LIFESTYLE



• EMPATHY

• SELF-CONFIDENCE

• SELF-EFFICACY

• MOTIVATION

• OPEN MINDED

• SELF-ORGANIZED LEARNER



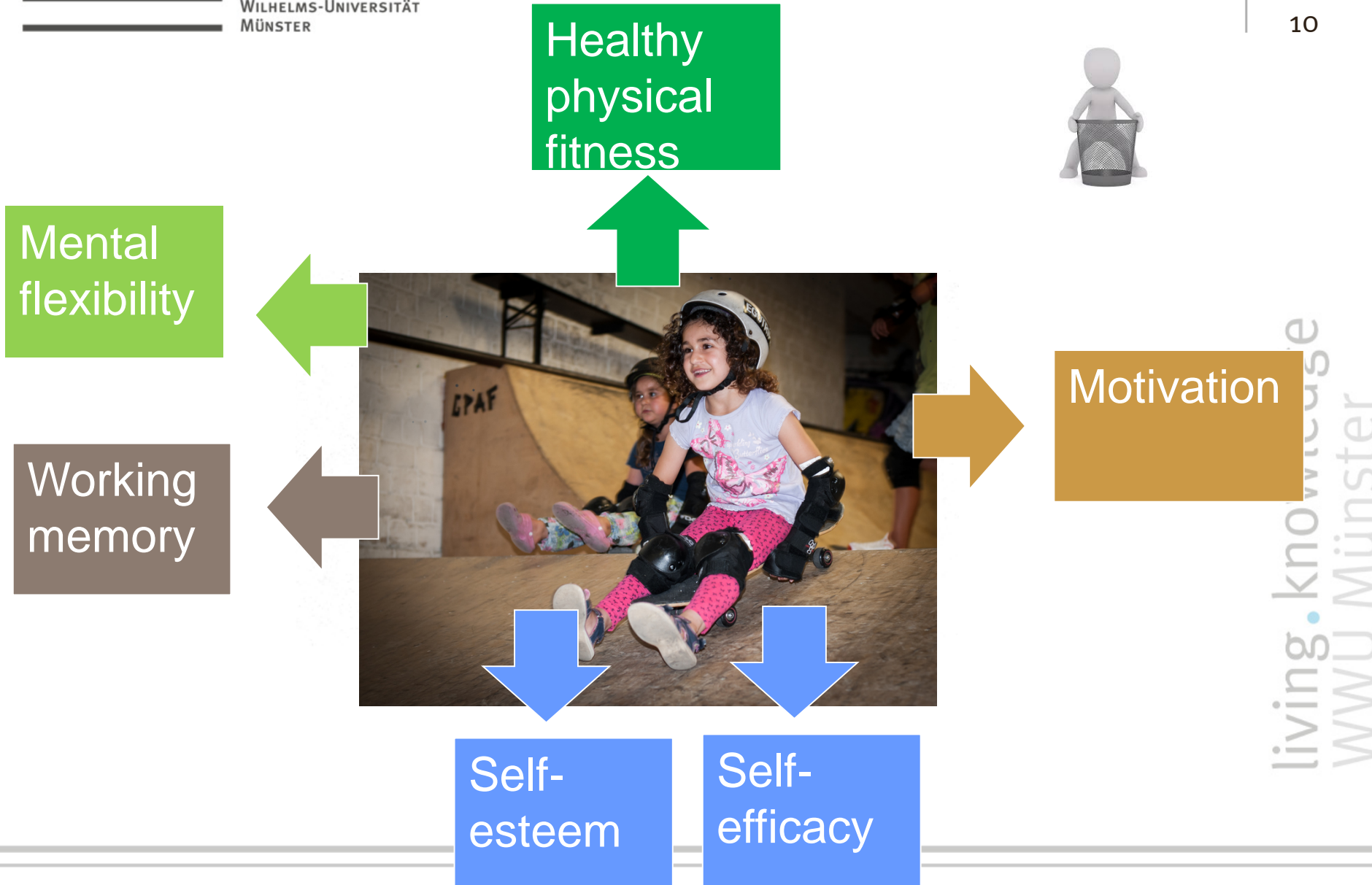


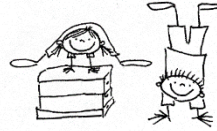
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Thank you

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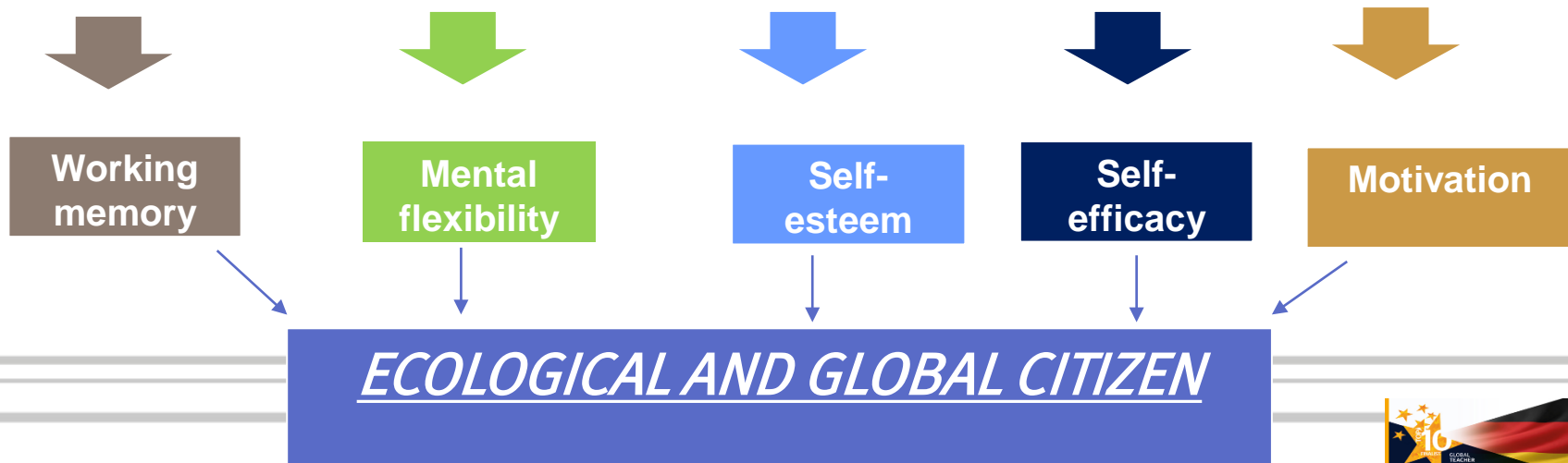




➔ The students positive success and autonomy experiences lead to higher self-efficacy and has a positive impact on the self-concept. Cooperative and self-determined learning enables students to learn democracy, ecological responsible and get confident in its own competence.

➔ Self-organized activities enable autonomous and self-determined decisions and social integration. This particularly highlighted self-responsibility and self-efficacy. Children and adolescents experience themselves as competent and self-effective in their acting.

3. USING ACTION-ORIENTED AND COOPERATIVE LEARNING METHODS



Imagine you are a child...

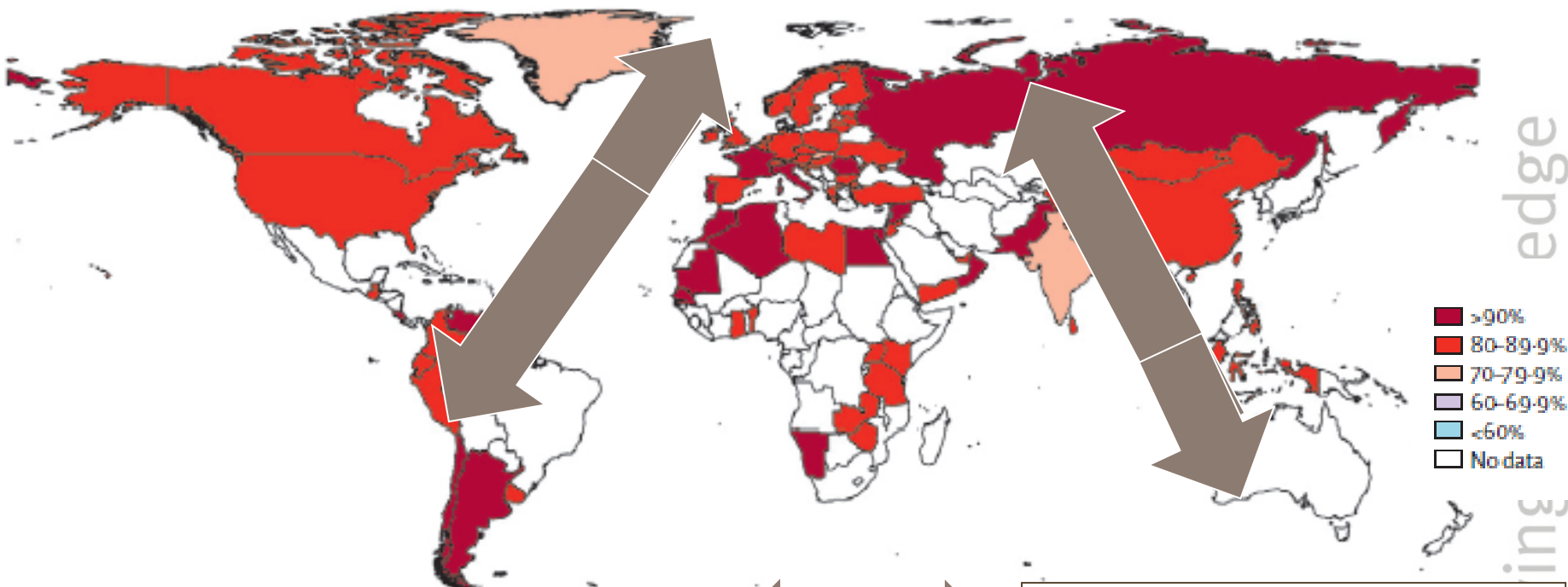


12

Physical activity

e.g. Hallal et al. (2012); Das & Horton (2012); Muthuri et al. (2014)

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Self-concept

e.g. Marsh et al. 2006; Ghanbari, 2015

Physical fitness

Health-related physical fitness
e.g. Strong et al. (2005); Malina (2007)



Weekly meetings with
the sportmentor kids
// doing physical
activity

- Children with unfavourable development condition (german and refugee children)
 - Giving each child an equal opportunity and encourages these children!
-
- University Students who becoming teachers
 - Getting a better understanding of children and a pedagogy competence

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