

# Relationship between geographical variations in participation and in environment in children with CP

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<http://www.irdes.fr/EnrgHi2010>

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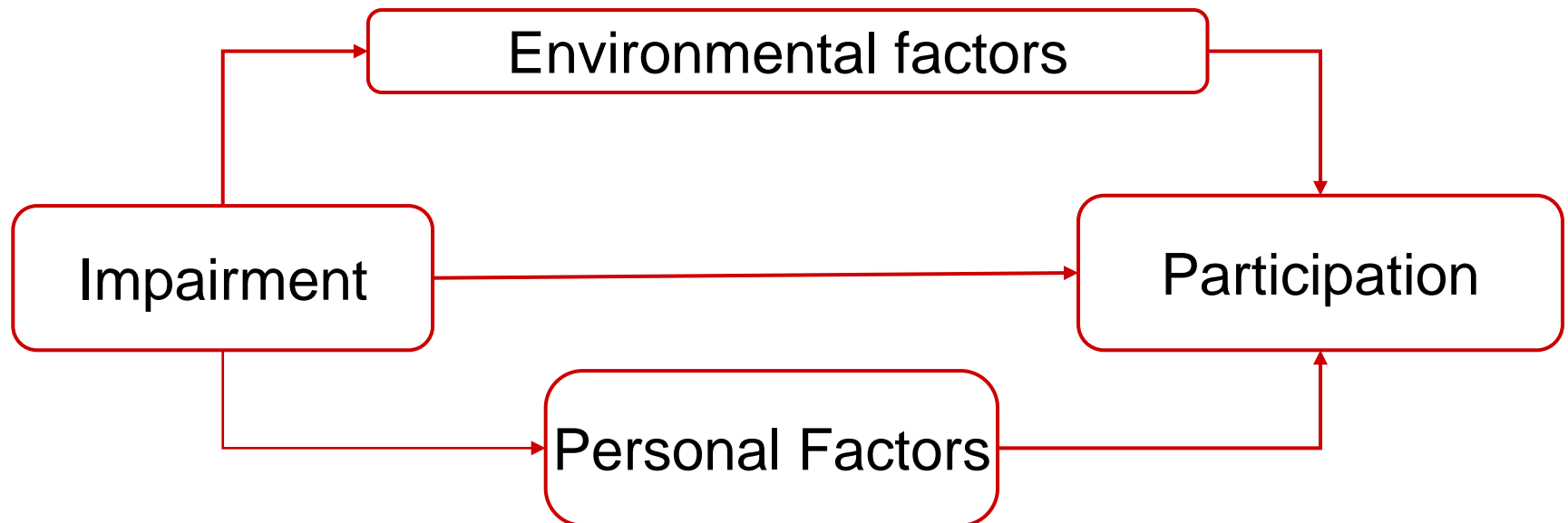
- SPARCLE
    - n Social model of disability
    - n Project
    - n Aims
    - n Method
  - Results
    - n Participation
    - n Environment
  - Conclusion
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# Social Model of Disability

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- Disability = interaction between the individual and their environment
- Participation = involvement in life situations



# SPARCLE Project

- Study of **P**ARTicipation of **C**hildren with cerebral palsy **L**iving in **E**urope
- 9 centres, 8 registers, 7 countries
  - United Kingdom (1, 3)
  - Sweden (2)
  - France (4, 8)
  - Ireland (5)
  - Denmark (6)
  - Italy (7)
  - Germany (9)
- 818 8–12-year-old CP children
- July 2004- July 2005





# Aims

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- To evaluate variations by type and severity of impairment of children with CP
    1. Involvements in life situations (participation)
    2. Physical environment, transport and social support
  - To investigate geographical variations in both participation and environment
  - Ü Recommendation to EU and local policies
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# Participation: Life-H

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62 items based on MHAVIE (*Fougerolles and al*)

- Daily life
  - n Meals
  - n Fitness
  - n Personal care
  - n Housing
  - n Mobility
  - n Communication
- Social roles
  - n Responsibilities
  - n Relationship
  - n Community
  - n School
  - n Leisures

**1. Eating meals, how does your child accomplish this?**  
*With/Without difficulty*

**17. Does your child select the type and amount of food he or she wants?** Yes (= > *With/Without difficulty*) / No (= > Too difficult/other)

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# Environment: ECEQ

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- European Child Environment Questionnaire: 60 items
  - n Physical, social and attitudinal environment
  - n At home, school, community + transport

**1. Does your child have suitably enlarged rooms or extensions at home?**

*Not needed / Yes / No*

**33. Does your child receive emotional support from wider family and friends?**

*Mostly yes / Mostly no*

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# Contextual factors

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- Gender, age of the child
  - Type of CP
  - Level and type of impairment
  - Pain felt by children
  - Family structure : parents, sibling
  - Type of school
  - Qualification of parents
  - Parents occupations
  - Type of housing
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# Participation in children

## Determinants

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Highly associated with

- n Walking ability and fine motor skills
  - n Intellectual impairment
  - n Communication difficulties
  - n Epileptic seizures
  - n Pain
    - o Few related to visual or hearing impairment
    - o No relation with
      - n Socioeconomical status
      - n CP type
      - n Schooling
-

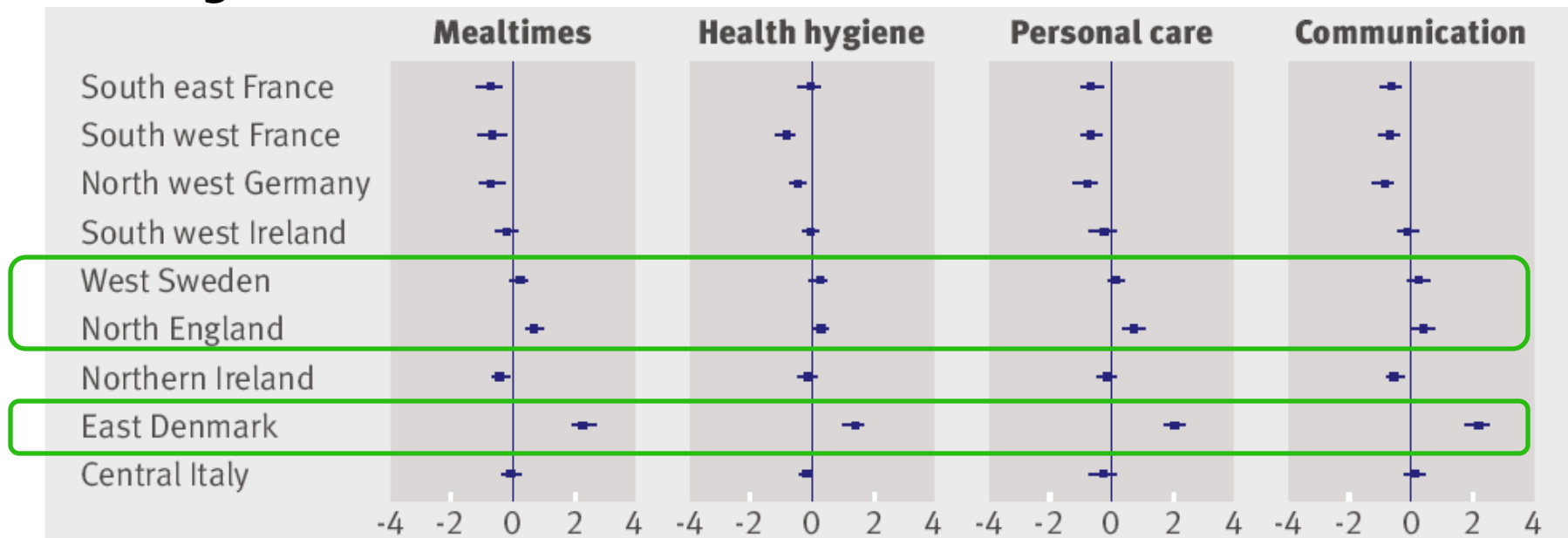


# Participation in children

## Geographical variations

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### Daily activities



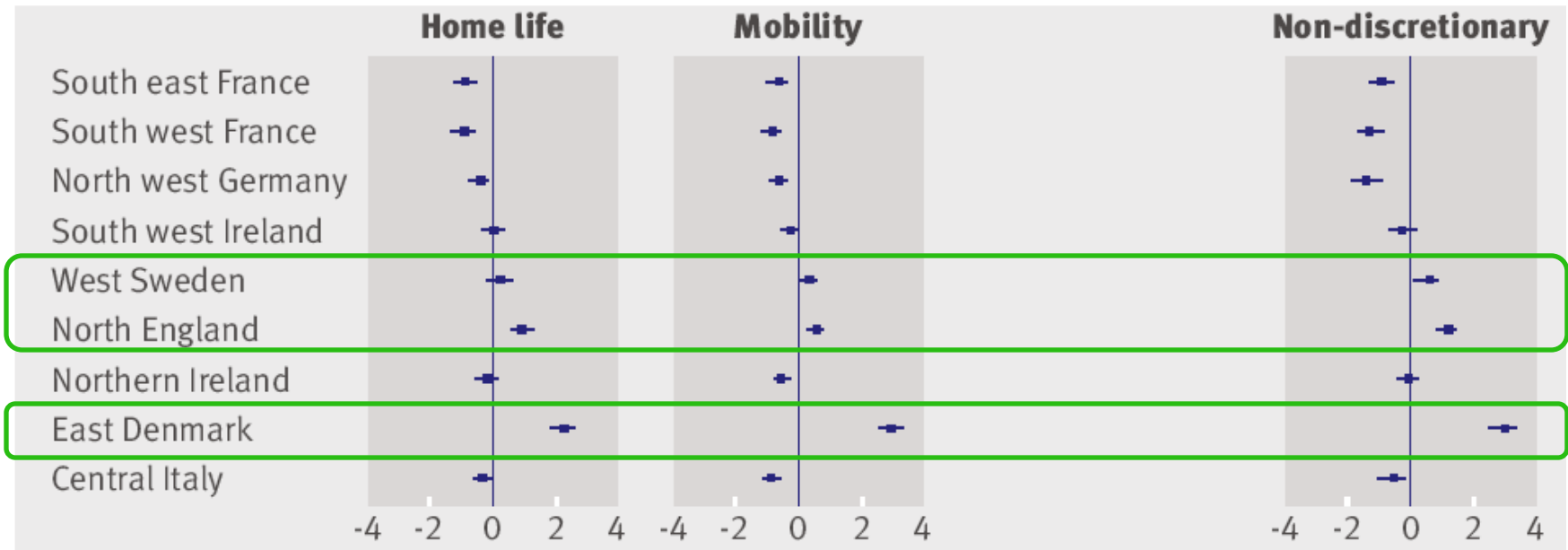
# Participation in children

## Geographical variations

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### Daily activities

Level's participation in essential activities

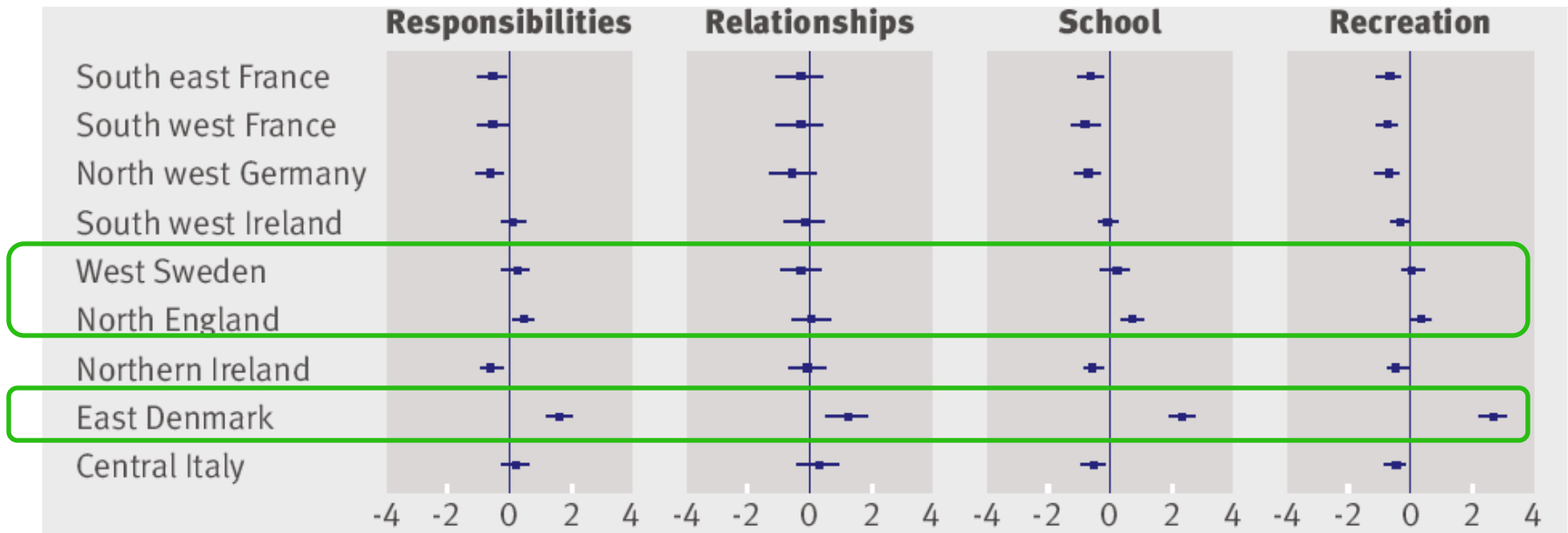


# Participation in children

## Geographical variations

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### Social roles





# Child's environmental access Determinants

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Physical environment				Social support		Attitudes		
Home	School	Community	Transport	Home	Community	Family & friends	Teachers	Classmates

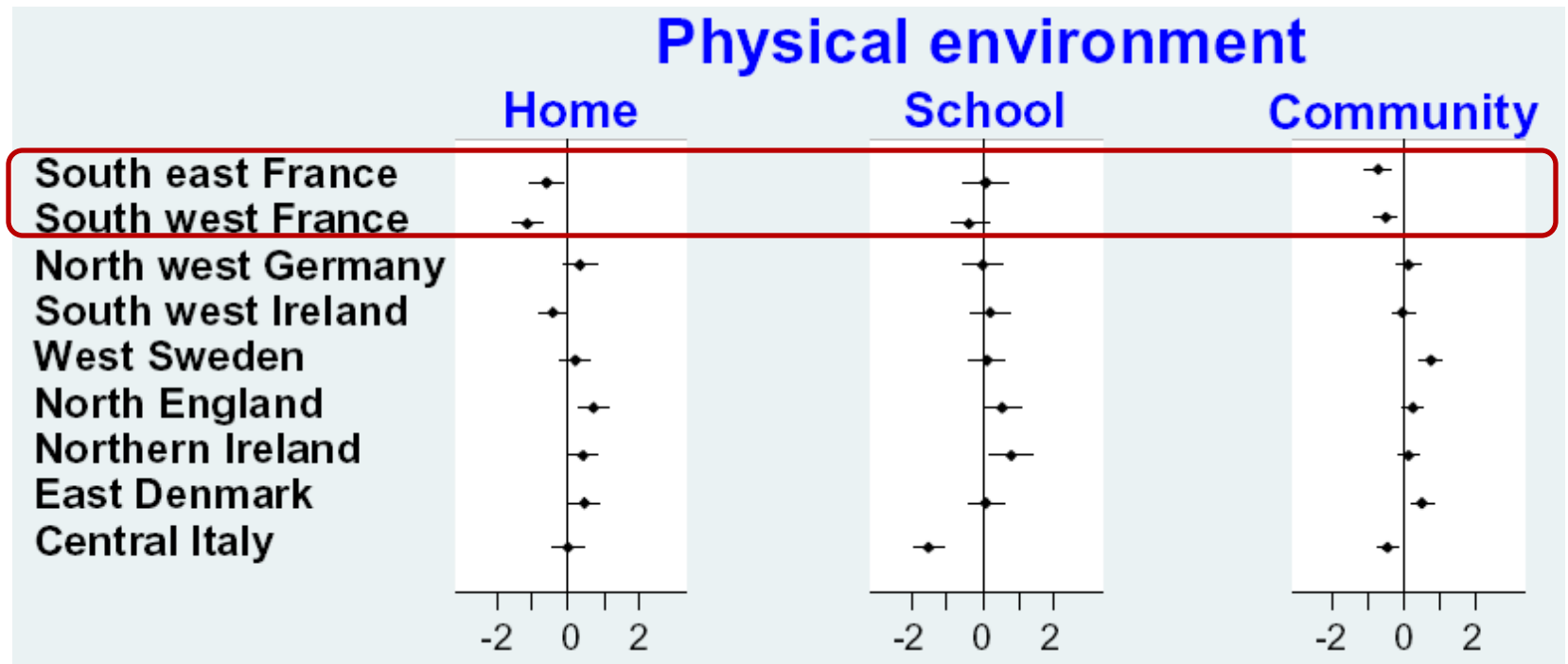
<b><i>Child's impairments</i></b>									
<b>Walking ability</b>									
<b>Intellectual ability</b>									
<b>Communication</b>									
<b>Type of CP</b>									
<b><i>Socio-demographic characteristics</i></b>									
<b>Parental employment</b>									
<b>Gender</b>									



# Child's environmental access

## Geographical variations

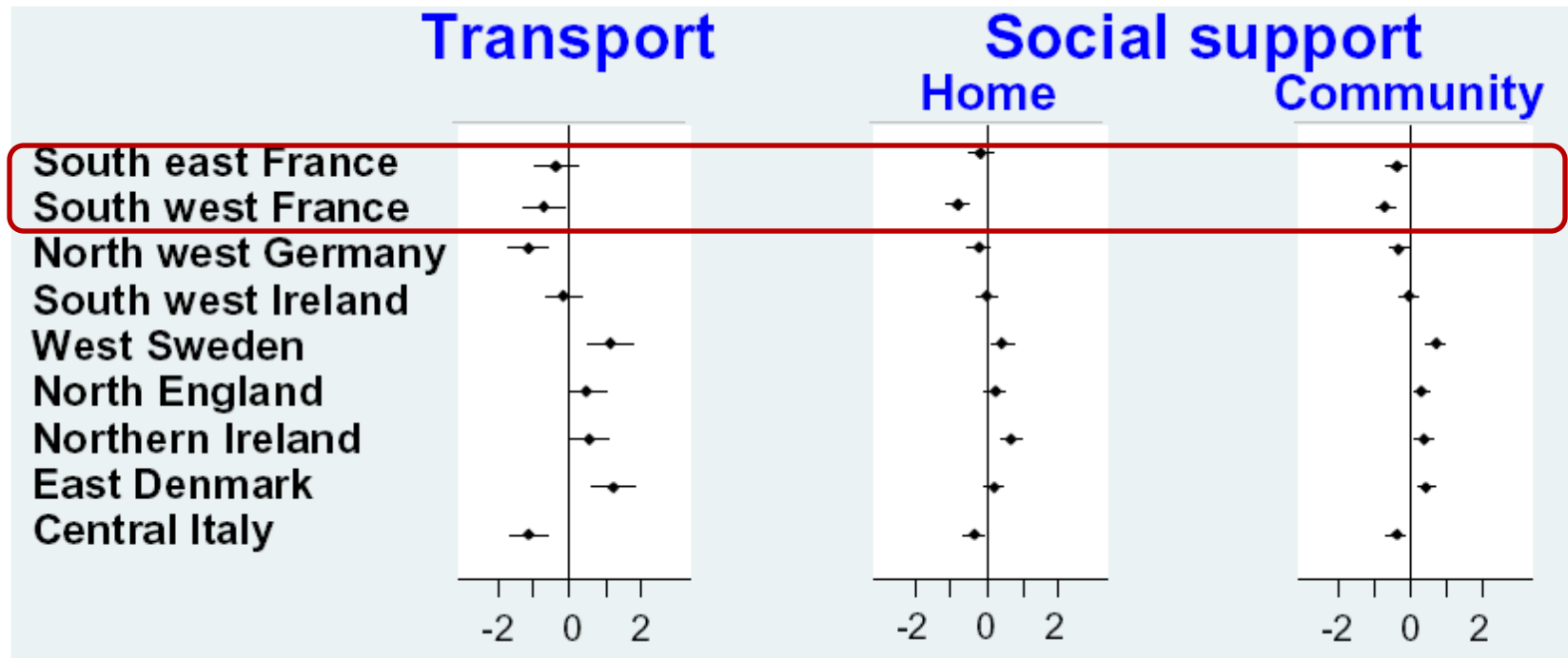
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# Child's environmental access

## Geographical variations

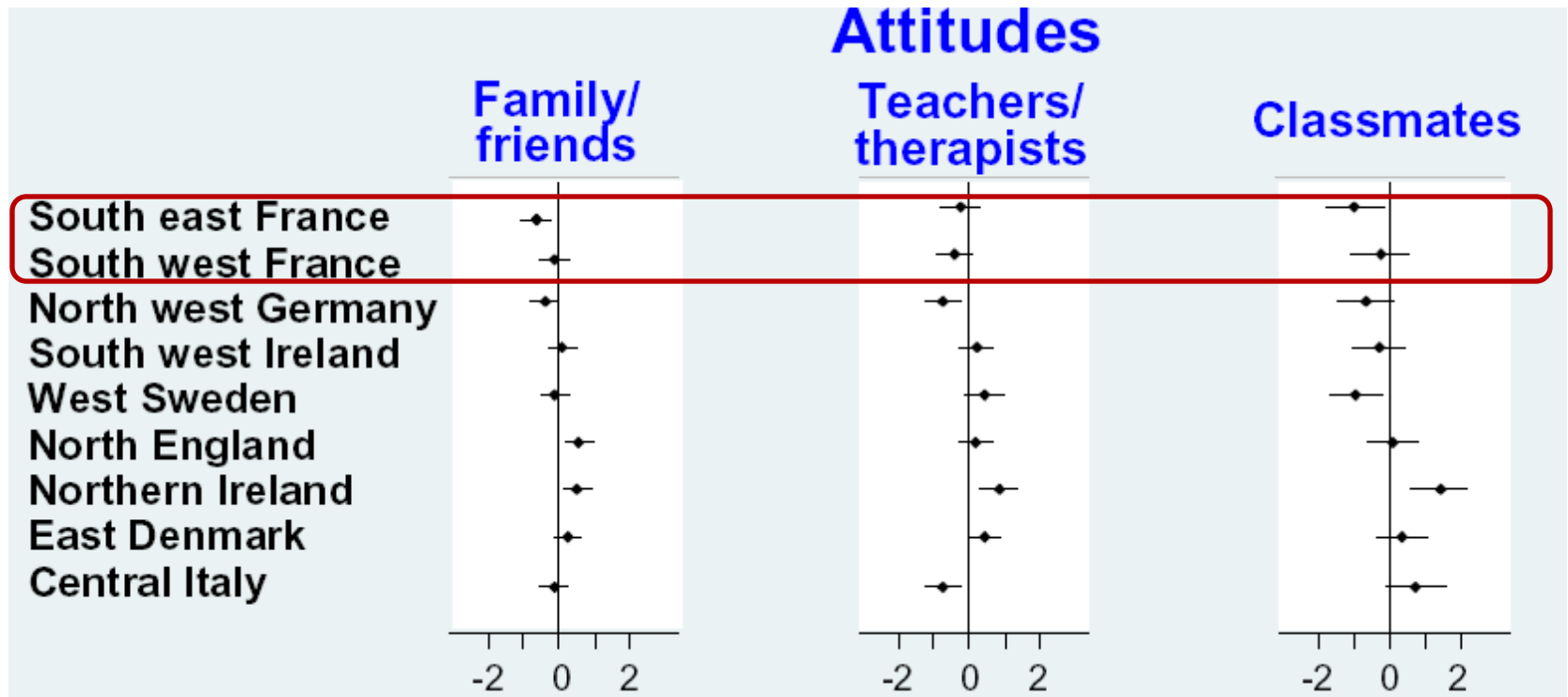
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# Child's environmental access

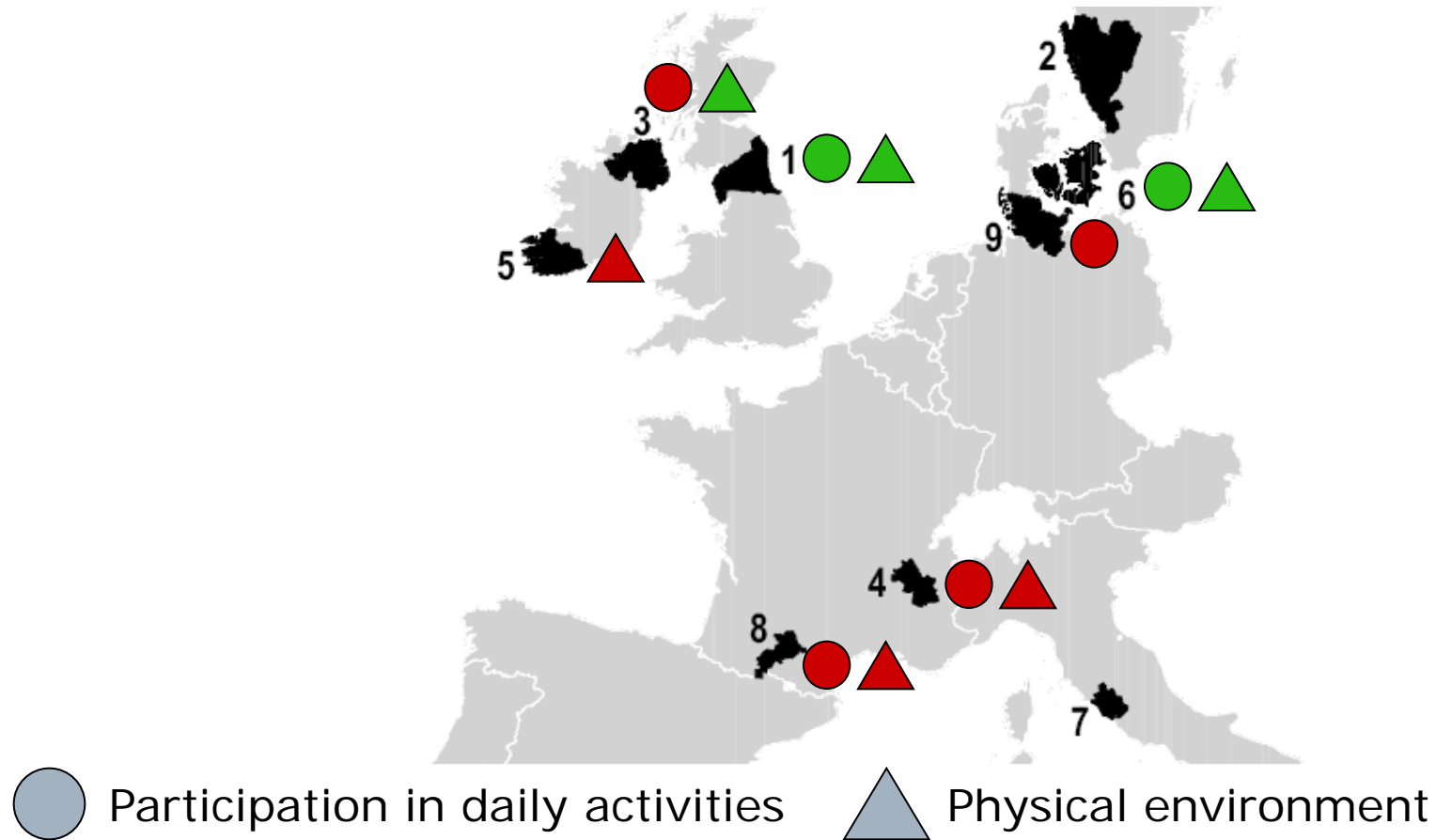
## Geographical variations





# Daily activities & physical environment at home

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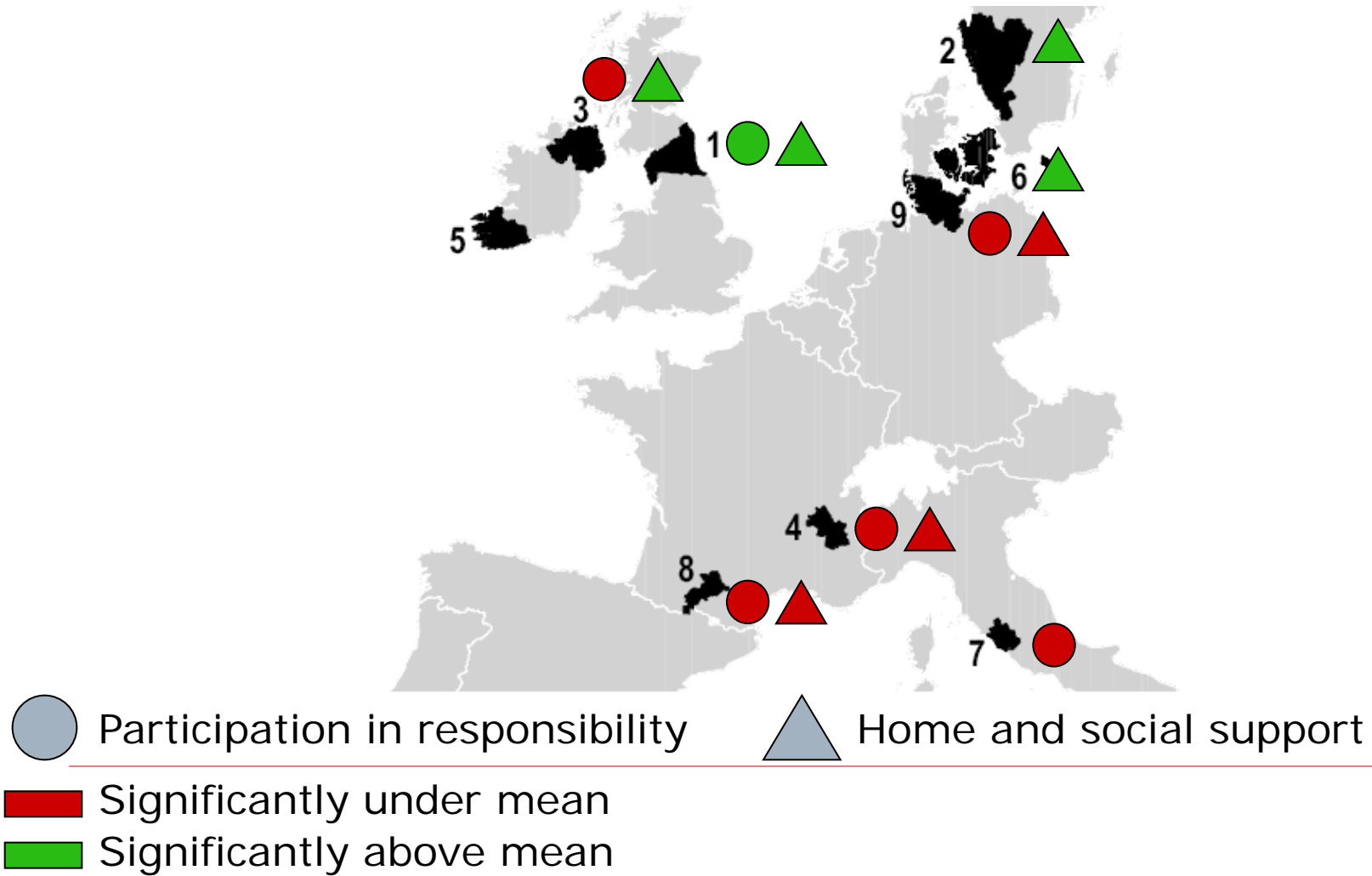
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Significantly under mean  
Significantly above mean



# Responsibility & home environment and social support

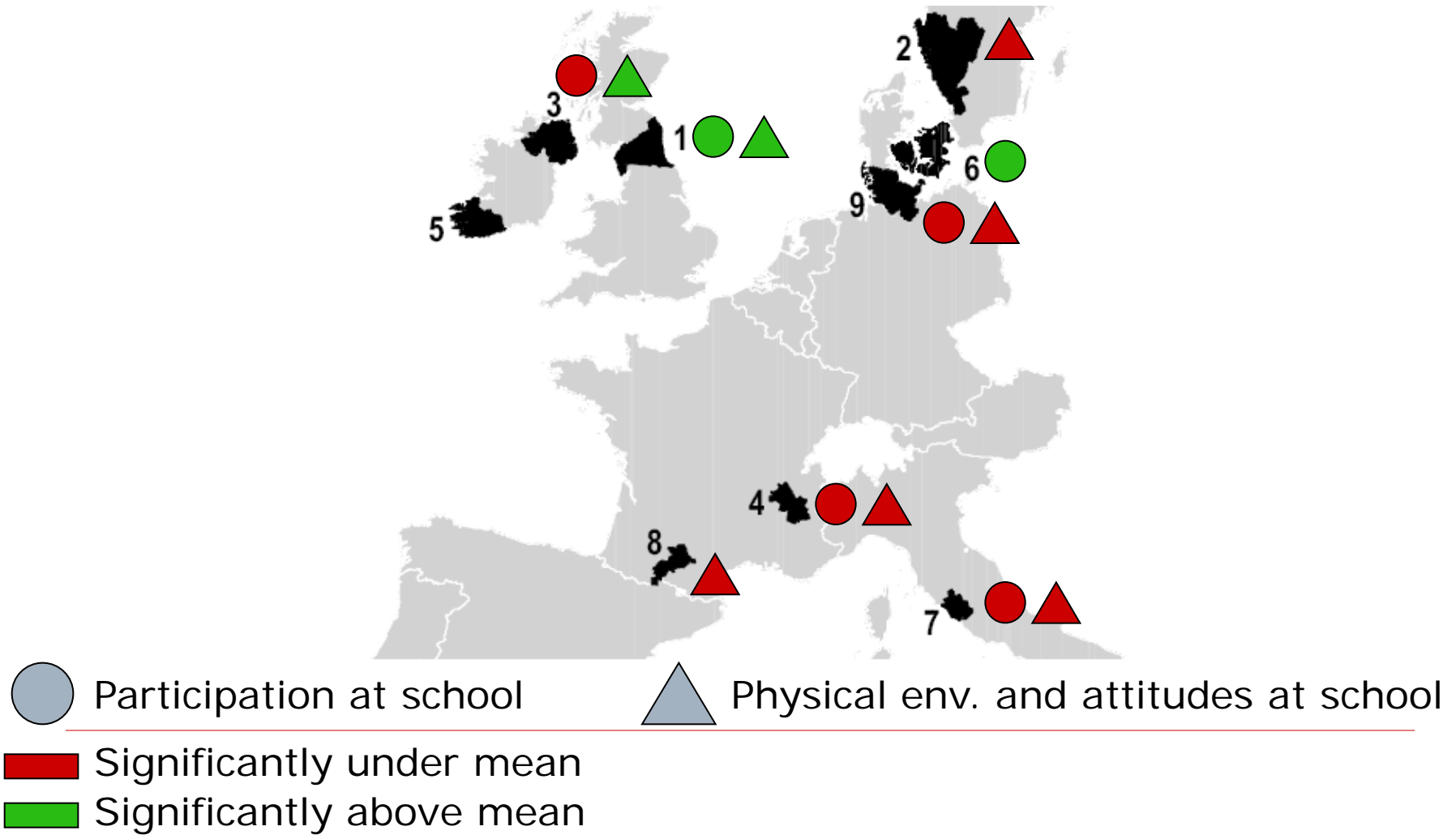
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# Participation at school & physical and attitudinal environment at school

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# Conclusion

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- Participation & Environment varied by
  - Level of impairment
  - Region
- Need for modelling relationship between participation & environment