

The 3rd European Health Literacy Conference 2015 | Management Centre Europe in Brussels, Belgium
17-19 November 2015

Methods of Measuring Health Literacy of Children



Results from the systematic literature review of health literacy instruments for children
and adolescents

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Review of the HLS-EU-Q-47 for application in the MoMChild project population

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Project Background

- The MoMChild project is a pretest study and started in March 2015 as part of the basic research stream of the German HLCA research consortium

Objective

- Development, construction, application and validation of a health literacy instrument in a child population of 9 and 10 year old 4th grade pre-schoolers
- First work blocks
 - Review of the literature
 - Review of the HLS-EU-Q for 9-10 year olds

Using two methods

1. Item-per-item and concept analysis
2. Using an adapted version of the 4-D Model (Forrest et al., 1997; Rothman et al., 2009)

Pros

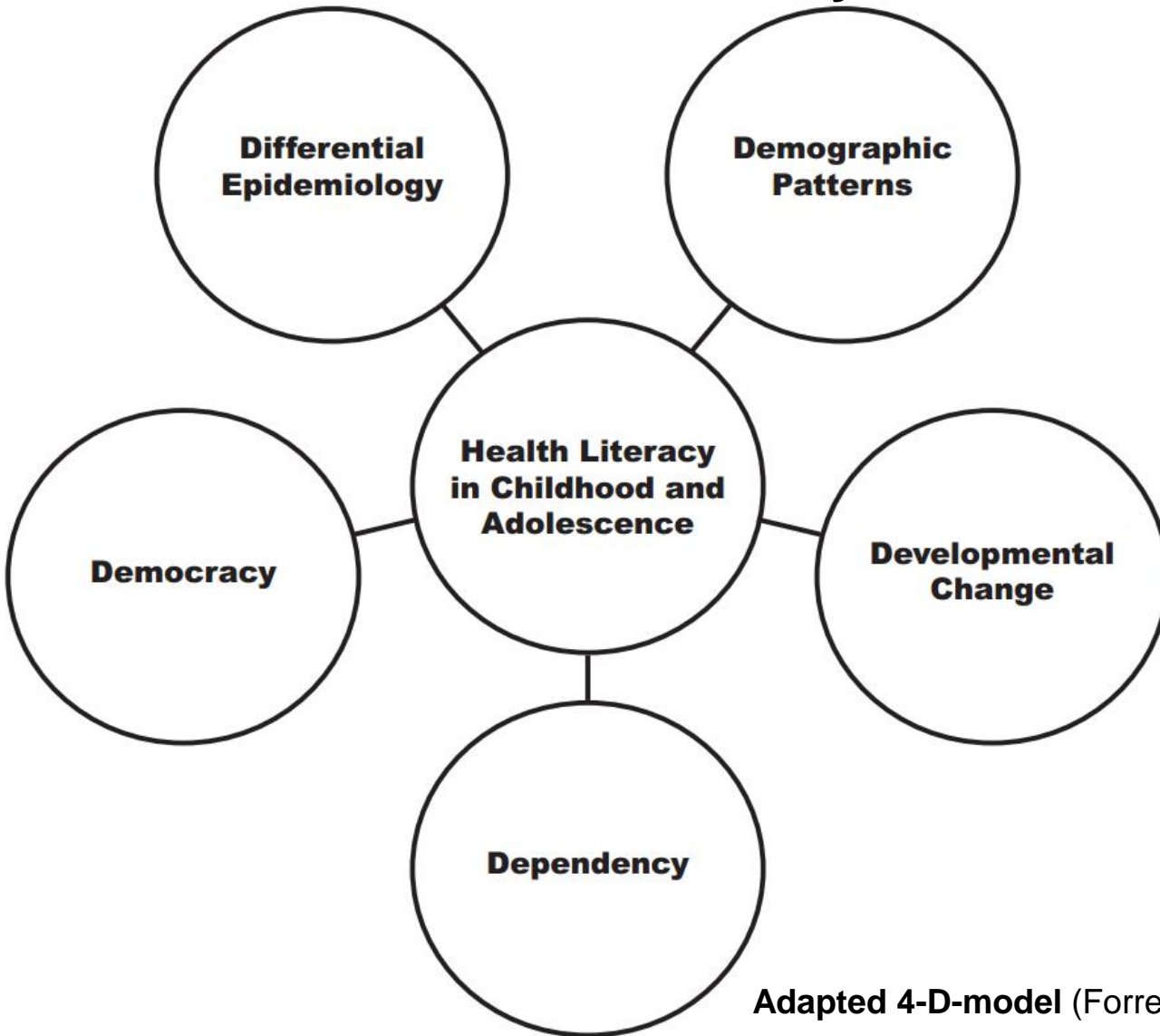
What	health information
Skills	access, understand, appraise, apply, make judgments, take decisions
Setting	everyday life
Domain	health promotion, disease prevention – including primary prevention

1

Cons

Domain	health care
Population	adults & adolescents vs. children
Method	self report

The health literacy 5-D-model for children and adolescents

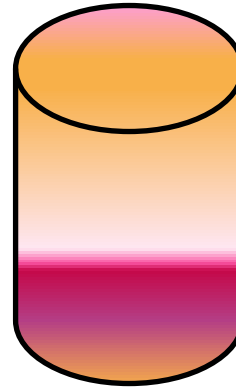


- Not considering children`s ecological worlds, or their health socialisation processes in family or school life
- Reading and grammar level above 4th grade
- Some items are above the developmental stage
- Some tasks primarily taken by parents
- Missing child health and interest topics
- Illnesses unique to children
- Child-related social interaction for health promotion and peer communication
- Child demographics and poverty related aspects missing

Adapted 4-D-model (Forrest et al., 1997; Rothman et al., 2009)

Search Design: Data Source and Search Strategy I

Databases



PubMed
CINAHL
PsycNet
ERIC
FIS

Search Blocks

Search Block I	Search Block II	Search Block III
Main Topic	Target population	Specific sub-topic
“health literacy”	“child*” “adolescen*” “youth*”	“test*”, “tool*”, “instrument*”, “questionnaire*”, “assessment*”, ”screen*”, ”survey*”, ”psychometric*”, and “review*”

Block 1,2,3

Search algorithm

((health literacy[Title/Abstract])
AND
((child*[Title/Abstract]) OR (adolescen*[Title/Abstract]) OR (youth[Title/Abstract]))
AND
((measur*[Title/Abstract]) OR (test*[Title/Abstract]) OR (tool*[Title/Abstract]) OR (instrument*[Title/Abstract]) OR (questionnaire*[Title/Abstract]) OR (assessment*[Title/Abstract]) OR (screen*[Title/Abstract]) OR (survey*[Title/Abstract]) OR (psychometric*[Title/Abstract]) OR (review*[Title/Abstract])))

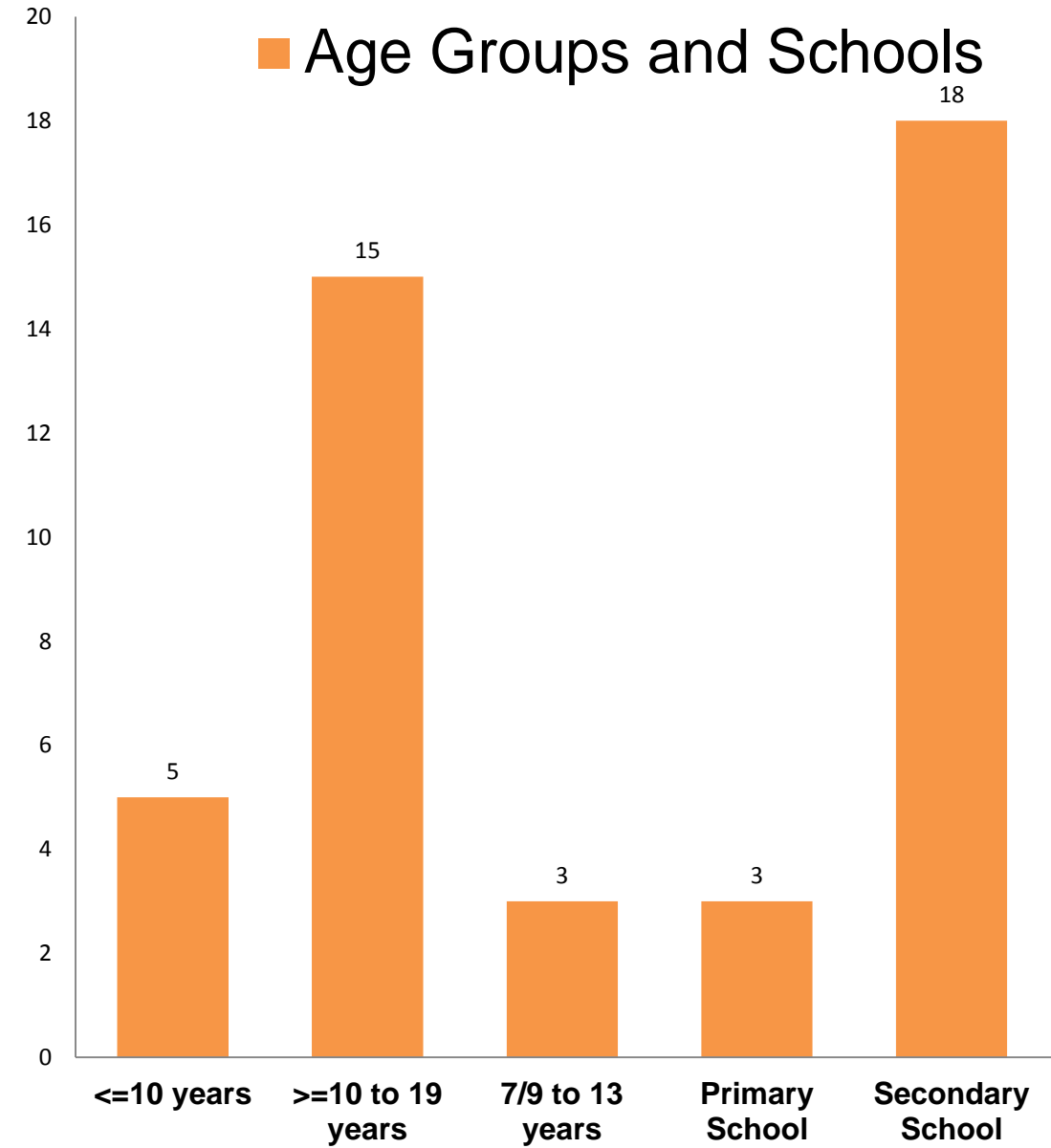
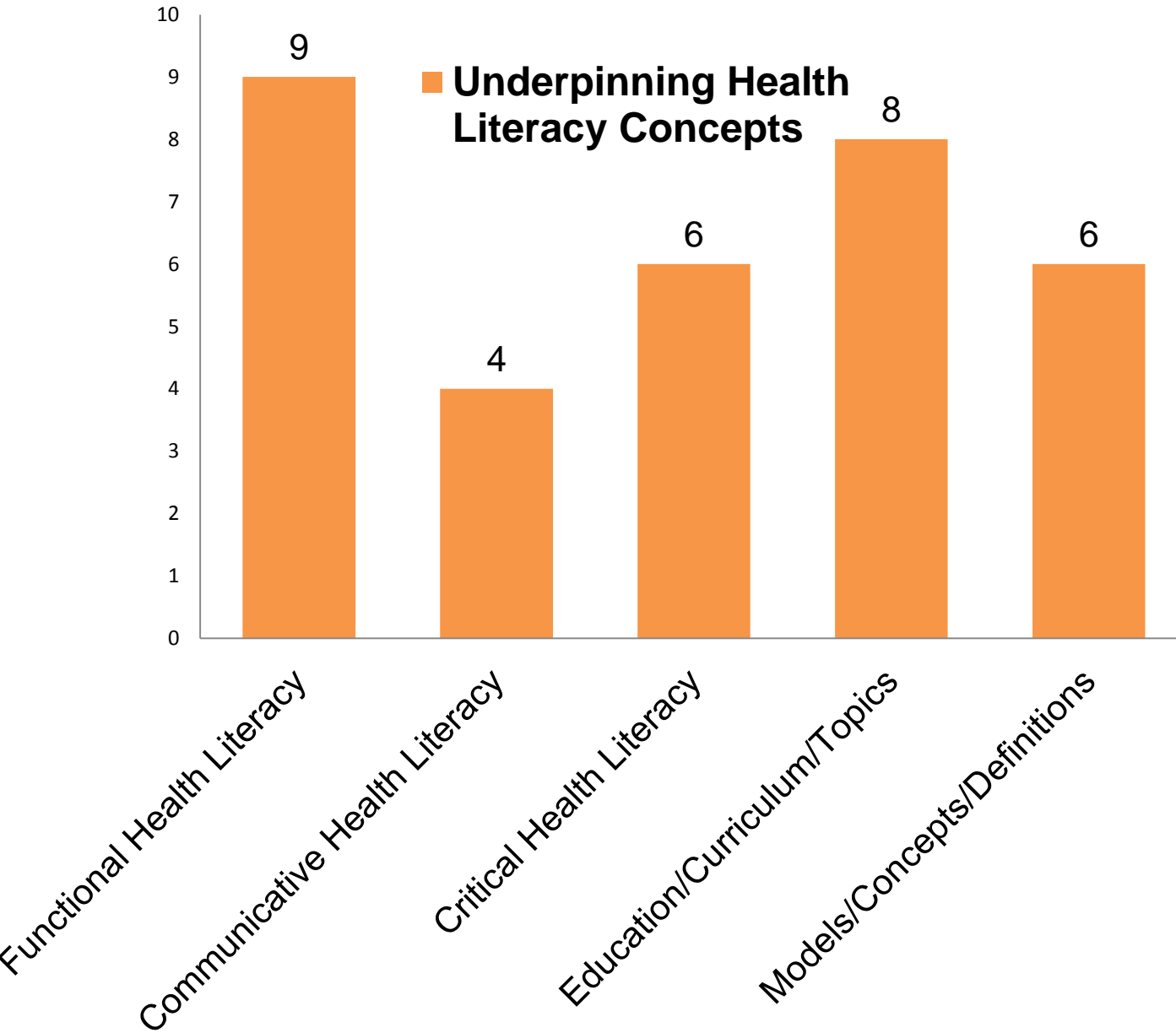
Eligibility

Criteria	Inclusion	Exclusion
Time	January 1990 – July 2015	Studies before 1990
Language	English, German	Any other language
Type of publication	Original publication, peer-reviewed journal, health literacy instrument, development/validation/application	Non-original, non-peer reviewed, editorials, letters, theses, reports, books, opinions.
Focus of study	Any study reporting on a general health literacy instrument	Context specific health literacy instrument, and any non-health literacy instrument
Study population	Children and adolescents (younger than 17 year old)	Any population 17 year old and younger
Setting	Any Setting	Nil
Country	Any country	Nil

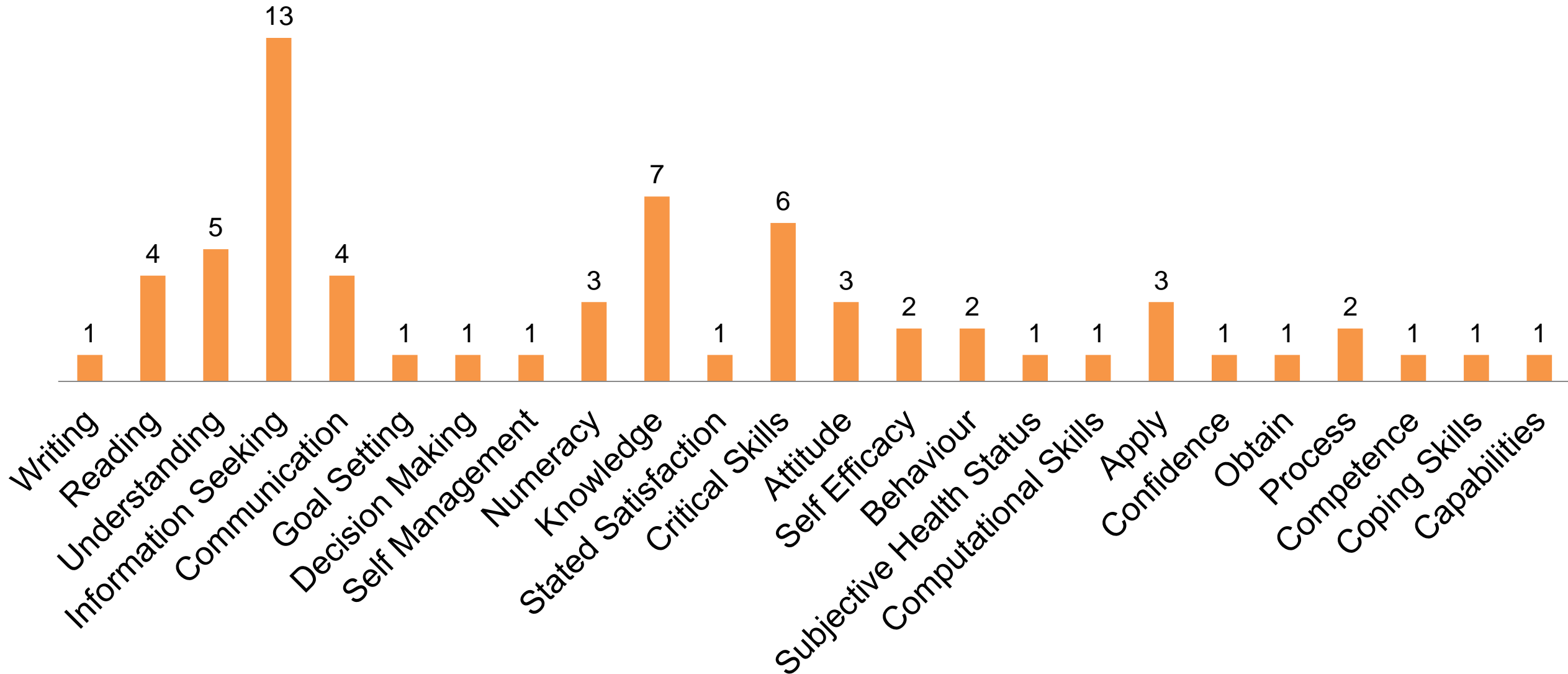
- Unique instruments found **N=20**
- Looking at the methodology
 - N=10 Performance-based assessment tools (PBA)
 - N=8 Self-report tools (SR)
 - N=1 Mixed tool using PBA and SR
 - N=1 Method not described

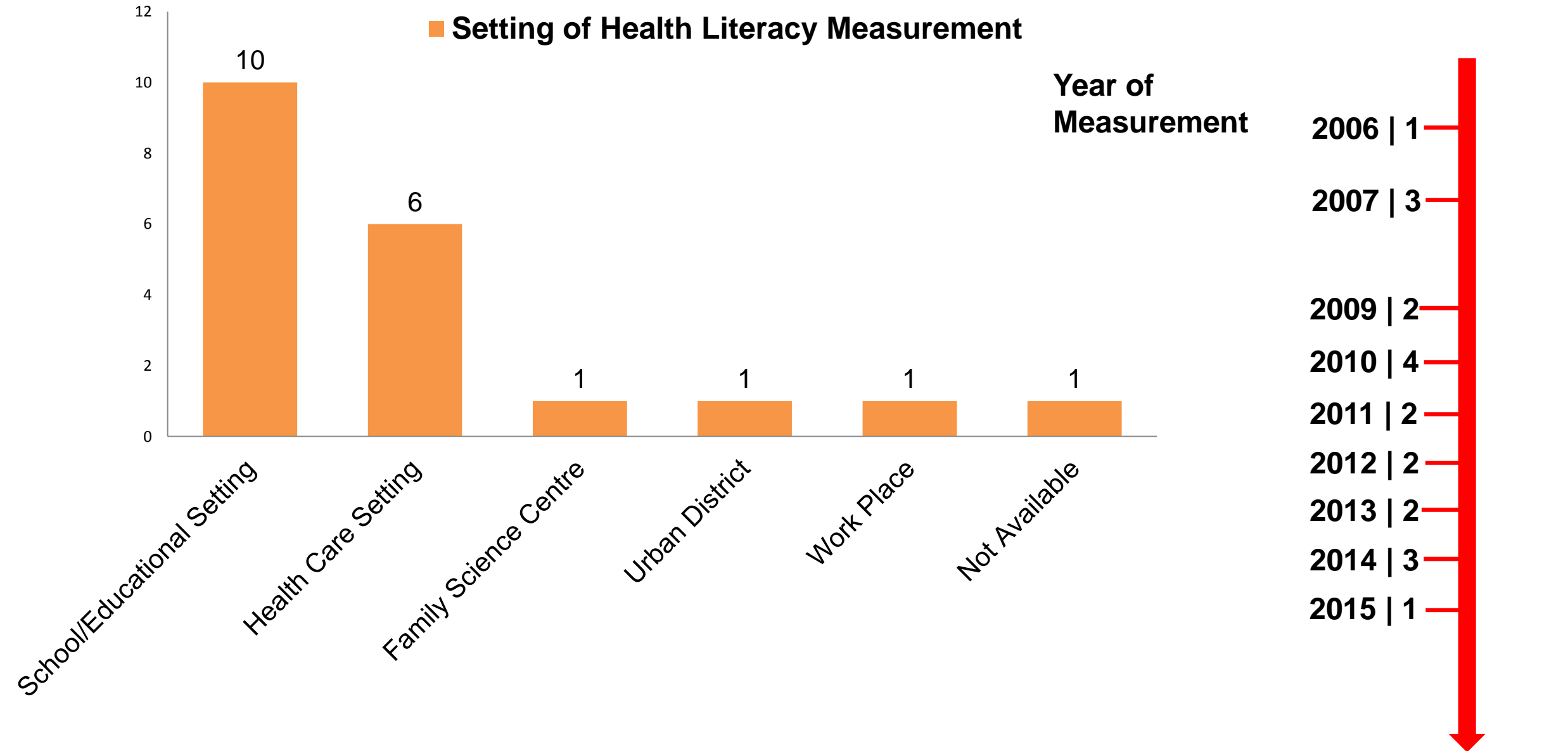
Looking at the population

- **N=5 encompassing our age population**
- **N=3 primary school, N=2 secondary school**



Health Literacy Components





Review of the HLS-EU-Q

- Difficult to use in 9-10 years old
- Domains, components or items can be adapted

Review of the literature

- 20 studies found, each used an instrument based on a different understanding of HL
- 5 including 9-10 year olds
- Components: information seeking, knowledge, critical skills, communication and understanding
- Framework: mostly (school) health education/promotion standards
- Lack of cultural competencies, developmental perspectives, interests, specific illnesses
- Only few studies have interviewed children/adolescents before developing the instrument
- Non of the studies involved children actively in the process of development

Implications

- Construction of health literacy and own instrument
- Dispositions, language, meaning making, child experiecenens and worlds

Stardate 1505.19112015.47



Where no man has gone before... 

This is the End!

Thank you!