Methods of Measuring Health Literacy of Children

2015 Health Promotion Conference
Health Literacy: Research, Policy & Practice
18 June 2015
Content of the Presentation

1. RATIONALE & BACKGROUND
2. OBJECTIVES
3. METHODOLOGY
4. SUMMARY & CONCLUSION
Child and Adolescent Health Literacy Research in HLCA project Germany

- Start date 03/2015 – 03/2018

- 10 Subprojects, including Synthesis Project

- Funded by the Federal Ministry of Education and Research (BMBF)

- Collaborative team science with partners from various fields, e.g. Education, Psychology, Sociology, Public Health

- Aiming at research in general Health Literacy, Mental Health Literacy and eHealth Literacy

- Mostly all projects will develop conceptual frameworks, tools and conduct surveys
Project Background in a Nutshell

• What: Tool development & validation

• Who: Target population children 9-10 years old

• How: Mixed Methods, Qualitative & Quantitative

• Where: Germany
Project Background in a Nutshell - Why

- Child and adolescent measures are not well developed compared to adult tools
- Most tools quest populations 15 y.o.++
- No adequate frameworks or models that can be translated into tools

MoMChild Target Population

Children 9-10 y.o. are crucial for health literacy research, their needs and their balance between autonomy and heteronomy differ from adults and adolescents

- Transition; secondary school
- Autonomy and personality development
- Cognitive, emotional, physical development
MoMChild Objectives

• Development of a valid questionnaire underpinned with a sound model and definition to assess health literacy levels of children 9-10y

• Development of a Milieu Typology related to the childrens life worlds (class-related lifestyles)

• Measuring Health Literacy of primary school children
Some Challenges when doing Health Literacy research with/in the Child Population

• Stage of life

• Childrens Worlds -> lifestyles?

• Content and context specific factors; what is important?

• How can an instrument adequately address children?

• Measurement of Health Literacy: Adaptation? New development? Crossover?

• Children`s participation?
<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Developmental Stage I</td>
<td>Concept Clarification and Survey Development</td>
</tr>
<tr>
<td>2. Qualitative Pilot</td>
<td>Cognitive Testing of the preliminary instrument</td>
</tr>
<tr>
<td>3. Developmental Stage II</td>
<td>Scale and Variables Modification; Completion of the Tool for Field Test</td>
</tr>
<tr>
<td>4. Field Test Quantitative Stage</td>
<td>Field Test in Schools and pupils</td>
</tr>
<tr>
<td>5. Analysis and Refinement I</td>
<td>Statistical treatment and analysis</td>
</tr>
<tr>
<td>6. Analysis and Refinement II</td>
<td>Milieu Typology Development</td>
</tr>
<tr>
<td>7. Finalisation</td>
<td>Questionnaire final version</td>
</tr>
</tbody>
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Work in Progress:

A systematic literature review (with reflective elements in the methodology) -> cross referencing
Using PubMed, Web of Science, PsycInfo, SSRN, Emerald, ERIC, Science Direct, CINAHL, BioMed Central

Objectives:
(1) Identification of methodologies and measurements of child/adolescent/adult HL,
(2) Creation of a robust knowledge base of the HL concept.

Results:

<table>
<thead>
<tr>
<th>Search Topic</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>original tools</td>
<td>n=66</td>
</tr>
<tr>
<td>systematic reviews</td>
<td>n=7</td>
</tr>
<tr>
<td>recommendation papers</td>
<td>n=16</td>
</tr>
<tr>
<td>taxonomic papers</td>
<td>n=21</td>
</tr>
<tr>
<td>target population tools (9-10y.o.)</td>
<td>n=3</td>
</tr>
</tbody>
</table>
Tools found for MoMChild Target Population

KidsHealth KidsPoll of Health Literacy of the National Health Education Standards based Tool (Brown et al., 2007, USA) (9-13 y.o.)

GeKoKids Tool: Based on the Nutbeam Typology and Health Promotion Outcome Model (Schmidt et al., 2010, Germany) (9-13 y.o.)

Instruments from Council of Chief State School Officers (CCSSO) State Collaborative on Assessment of Student Standards (SCASS) Health Education Assessment Project (HEAP) (Benham Deal et al., 2010, USA) (8-9 y.o.)
State of the art

No valid questionnaire to assess health literacy in 9-10 years old primary school children that is underpinned with a target population adjusted model and definition

GAP IN VALIDITY-DRIVEN TOOLS
Concept Clarification

Conceptual Framework Development and Understanding of Health Literacy

Health Literacy

Knowledge

Cultural
Social
Cognitive

Action

Skills

Further Parts

Self-determination
Quality of Life
Health Behaviour
Self-reported Health

Life World
Information for
Milieu Typology

Psychographic characteristics

Socio-demographic characteristics

Age
Gender
Parents' Education
Immigrant Status
Living Situation
Parents' Ethnicity
Birth Order
Religiosity
SES
Health Status (…)

Beliefs, Values, Attitudes, Interests, Expectations, Consumptions, Leisure

Cultural
Social
Cognitive

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Health Literacy in Childhood and Adolescence

Methods of Measuring Health Literacy of Children (HLCA - MoMChild)

Preliminary MoMChild Health Literacy Concept in relation to Milieus or Tastes or Social Spaces

Model

Health Literacy Levels

Nutbeam Typology
- Functional skills
- Interactive skills
- Critical skills

HLS-EU Matrix
- Access/obtain
- Understand
- Appraise/judge/evaluate
- Apply/use

Health Care
- Disease
- Prevention
- Health Promotion

Milieu Typology
- Dispositional skills
  - (class-related capability to act health literate)

Pierre Bourdieu, Distinctions, 1984

Practice Theory

Mediating between Subjectivism and Objectivism

An Approach to dialect between social structures and human agency in a dynamic relationship.

http://rr.proquest.com/tag/research/
Summary

• Development of a valid Health Literacy Questionnaire for Children 9-10-y.o.

• Based on a Conceptual Framework, including Dispositional Skills and Attitudes (Milieu Typology)

• Challenges and Difficulties

• Literature Review Results, Lack of Instruments for the Target Population

• Understanding of Child Health Literacy?

• Including Children to the Research
Health Literacy in Childhood and Adolescence
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This is the End!

Thank you!