Health Literacy in Childhood and Adolescence (HLCA): "Methods of Measuring Health Literacy of Children (MoMChild)"

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Abstract (max. 3500 chars)

Introduction: Health literacy (HL) has gained renewed attention in health promotion and education research as well as in international policy making. Even if there is a slightly observable movement in child/adolescent HL research, the focus still remains on adults when developing models, measures, tools or interventions. The "Methods of Measuring Health Literacy of Children (MoMChild)" project is part of the recently started "Health Literacy in Childhood and Adolescence (HLCA)" consortium, which is a partnership of 5 German universities that aims at conducting evidence-based child/adolescent HL research for 3 years in 10 subprojects. The MoMChild's main objective is to develop a valid questionnaire to measure HL in primary school children (ages 9-10). The tool will be based on an underpinning HL model that specifically addresses the target population. In order to assess the relevance of social environments for healthy child development and growth, the project also aims at framing class-related milieu structures to outline dispositional HL patterns.

Methods: Using mixed-methods, the tool development follows 7 steps, including multi-level perspectives on HL, understanding of real-life contexts, and socio-cultural influences. The concept clarification and survey development (1) is currently in progress, which will be followed by (2) a qualitative pilot study with cognitive interviews (n=25), (3) scale and variables modification, (4) a quantitative field test in (n=40) schools and (n=1000) pupils, (5) analysis for variety and variance explanation, (6) milieu typology development based on a factor and latent-class-analysis, and finally (7) the completion of the tool. HLCA is aiming to use the final tool within a second project stage (2018-2021) in a nation-wide representative school survey. A systematic literature review is currently underway that aims at identifying existing measurements of child/adolescent/adult HL, and to create a robust knowledge base of the HL concept. This work is carried out by 3 researchers searching for articles from 1970-2015. While a first screening of 9 online databases (PubMed, Web of Science, PsycInfo, SSRN, Emerald, ERIC, Science Direct, CINAHL, BioMed Central) has been done already, a second run is planned for July 2015 to confirm and renew the results.

Results: The first wave of the review led to preliminary results. The investigators identified (n=66) articles reporting on original tools, (n=7) systematic reviews, (n=16) recommendation papers, and (n=21) with taxonomic information so far. A first in-depth screening of the results indicates the existence of only (n=3) straight HL tools and (n=3) models for the age group MoMChild is aiming at. All tools (n=3) matching the age criteria are grounded on the found models, which are either based on school health education standards, or on the Nutbeam typology and attributes related to his outcome model (knowledge, attitudes, communication and behaviour). The evaluation of the review is still in progress.

Conclusions: Preliminary screening of the literature highlights the current gap, inconsistencies, and substantial limitations in the measurement of HL in a child population, especially in 9 and 10 year old students. This implies the need for a significant scope for the development and evaluation of psychometrically valid measures related to a broad HL concept and relevant attributes. The ongoing data analysis needs to confirm the first results.