The Effectiveness of Reading and Writing Interventions for Students with Intellectual Disabilities.

A Systematic Review and Meta-Analysis.

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The aim of the present study is to identify effective reading and writing interventions for students with Intellectual Disabilities (ID).

Reading and writing is complicated processes that simplified can be conceptualized as Reading = Decoding X Linguistic Comprehension and Writing = Encoding X Linguistic Comprehension. Students with ID are at risk of failure in their reading and writing development and robust knowledge about effective interventions are missing. Research on reading and writing interventions for students with ID have usually low power because of few participants. Meta-analyses can then be useful because they provide the effect sizes of group differences of all the included studies and thereby statistical aggregate study findings and offer increased statistical power.

This is the first systematic review and meta-analysis to investigate both reading and writing interventions for students with ID. The research questions guiding the study are: What is the effect of reading and writing interventions for students with ID?; What are eventual the common instructional features across the effective interventions?; What evidence exists to demonstrate transfer of intervention effects beyond proximal measures? Databases relevant for education, psychology, humanities, social science, health-care and technology were searched. All sorts of hits were accepted; journal articles, dissertations, books or books chapter without date limit. To be included the studies had to include: 1) students identified with ID; 2) students aged between 4 to 19; 3) interventions focusing one or more elements of reading or writing, or both; 4) a randomized controlled trial (RCT) design or a quasi-experimental study (QES) design; 5) a pre-posttest design; 6) measures on reading or writing, or both.

The searches in databases generated 14,835 hits. 9,479 hits were left after removal of duplicates and which abstracts were screened according to the study inclusion criteria. After the initial abstract screening 142 full text have been screened twice. An inter-rater reliability will be estimated for a random sample of e.g. 50 % of the studies coded by an independent researcher trained in meta-analysis. Finally, preliminary results shows that 10 studies meet the inclusion criteria and will be included in the meta-analyses. The data extracted will be coded in the program Comprehensive Meta-Analysis. Nine of the studies addressed reading and one writing. No studies address both reading and writing intervention.

In line with the preliminary results, it seems important to extend the existing research base with experimental studies with control groups. Students with ID frequently receive special education, and the practice field is in need for research-based knowledge on effective reading and writing interventions. The analysis is ongoing and the results and its implication will be presented as a poster at the conference.