

Bus Travel Training Programs to Identify Active Ingredients for Learning Among Transition-Age Youth With Cognitive Deficits

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PURPOSE: Transition-age youth (TAY) with cognitive deficits have limited community mobility. Travel training programs can increase access to public transportation, but little is known about their scope and efficacy for this population. Our purpose is to assess the efficacy of bus travel training programs for TAY with cognitive deficits and determine the active ingredients of these interventions.

DESIGN: We conducted a systematic literature review across 7 databases. Studies were eligible if they were published in English in a peer-reviewed journal, included participants 30 years-old or younger with cognitive disabilities, and reported changes in community mobility-related outcomes through use of bus travel training interventions.

METHOD: We used the PRISMA guidelines for Systematic Reviews. Covidence software was used to screen studies and extract data. Critical appraisal was completed with LEGEND, and risk of bias assessment is being completed with the RoB 2.0 and the ROBINS-I. Next, GRADE analysis will be used to examine the body of evidence, and the Rehabilitation Treatment Specification System (RTSS) framework will be used to identify active training ingredients.

RESULTS: Preliminary results are provided. Currently, 24 studies are included in this ongoing review. The evidence for bus travel training among TAY with cognitive deficits is largely positive and uses in vivo bus travel practice (~90%). However, the literature is also older (~63% >10 yrs.) and of low methodological quality (~8% RCTs).

CONCLUSION: While bus travel training seems to improve community mobility for TAY, many studies are outdated and do not use established programs. Technology can be used to innovate training delivery and support independent travel, but more rigorous research is needed. Ultimately, these findings will improve the resources available to TAY with cognitive deficits, increasing their community participation and inclusion.

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