

AB098. Perceptual, motor and cognitive factors related to braille reading performance in aging: a scoping review

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Background: A growing number of older adults with vision loss require vision rehabilitation services to address reading difficulties. Braille may be the most appropriate option for those with functional blindness, poor visual prognoses or dual sensory loss. While standardized braille assessment and training protocols are in place to guide interventions with children, there is a high degree of inconsistency and a lack of evidence-based knowledge about best practices to use with adults and seniors who require braille training. Age-related declines in tactile acuity, motor dexterity and cognition present unique barriers to braille training, but very little is known about the impact of aging on factors related to braille reading performance. The aim of this scoping review is to identify the perceptual, motor, and cognitive factors related to braille reading performance and to determine how these factors have been assessed or measured among blind adults and elderly individuals in prior studies.

Methods: Using the scoping review method, a comprehensive search was conducted in three databases: PubMed, Educational Resource Information Center (ERIC), and the Cochrane library. Two reviewers screened articles for inclusion to ensure internal agreement, based on identified exclusion criteria.

Results: The initial search resulted in 1,565 qualitative and quantitative articles. The results synthesize the perceptual, motor and cognitive factors known to predict braille reading performance, how these variables are impacted by the aging process, and how they have been measured in prior studies.

Conclusions: This scoping review is the first step in working towards the development of evidence-based assessment and training protocols to standardized practice with adult and senior clients who require braille training. It also serves to clarify where current knowledge gaps exist in order to guide future studies on braille reading and aging.

Keywords: Blind; braille reading; aging

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