

Facilitators and Barriers Encountered by Older Adults Who Learn Braille: A Qualitative Study

Natalina Martiniello, M.Sc, CVRT^{1,2}, Leila Haririsanati, M.Sc¹, and Walter Wittich, PhD, FAO, CLVT^{1,2,3}

¹ School of Optometry, University of Montreal ² CRIR/Centre de réadaptation Lethbridge-Layton-Mackay du CIUSSS du Centre-Ouest-de-L'Île-de-Montréal ³ CRIR/Institut Nazareth et Louis-Braille du CISSS de la Montérégie-Centre



Purpose

- The prevalence of older adults with vision loss continues to increase³
- Reading difficulties are the most common reason for referral to vision rehabilitation¹
- Braille is one reading option for clients with functional or progressive blindness
- Prior braille research focuses almost exclusively on children
- Aging is associated with declines in tactile perception, working-memory and fine-motor skills, though little is known about the impact this has on braille training²
- The purpose of this study is to better understand the experiences of adults and seniors with acquired vision loss who learn braille

Prior Research on Braille and Aging

- Little is known about the experience of learning braille later in life, and no evidence-based methods exist to meet the growing need of adults and seniors who pursue braille training
- A scoping review identified 27 studies examining factors that influence braille reading performance
- Only 6 included any participants over the age of 65, and in most cases sample sizes were small (23 had <40 participants) and are unreplicated (see Figure 1)

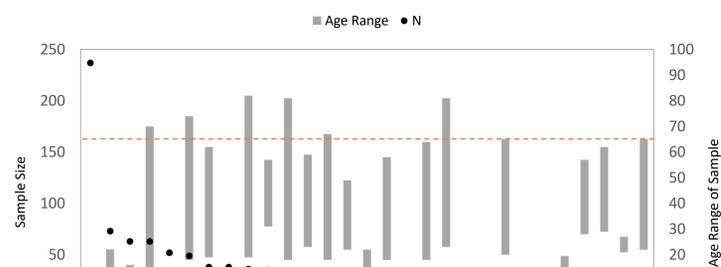


Figure 1: Graph showing the age range and sample sizes of 27 studies examining factors that impact braille reading performance

Methods & Research Questions

- What are the experiences of older adults with acquired vision loss who pursue braille training?
- What facilitators and barriers influence the braille training process?

- Semi-structured qualitative interviews were conducted by telephone with legally blind participants from across Canada who learned braille after age 30
- Interviews were transcribed verbatim and coded by two members of the research team - >98% agreement, Gwet's agreement coefficient = .988 (range .959 – 1.0)⁴
- A phenomenological approach was applied during analysis to capture the common experience of learning braille in older adulthood

Participant Demographics



Results

Personal Factors

Motivations to Learn Braille

- Influence of prior identity
- Influence of prior learning experiences
- Motivation tied to regaining independence
- Technology does not meet all needs
- Influence of progress/milestones during training

Psychosocial Factors

- Feelings towards vision loss
- Feelings towards braille
- Feelings towards age when braille is learned

Physical Characteristics

- Tactile perception
- Working memory of braille symbols
- Hand movements

“when I read print I had an internal voice that read along with me. And when I read braille, I get my internal voice back. It’s just ... My existential self is kind of reaffirmed.”

“It’s like when you’re a kid with your shoelace, the first time you tie your shoelace, you’re a little kid and you don’t think about it you’re just, ‘oh my god, my laces are done!’ ... then you know all kind of things are possible, you’re heading down the right road.”

“I went through the ‘in-between’. It’s between losing the ability to see and read print, and then this little gap where all I’m doing is listening to things and of course I’m learning to listen to things because I haven’t had to do it all my life (...) I felt helpless (...) So it felt a little bit like Lazarus rising (...) It’s that crisis that happens when you have yourself taken away, the things you identify with strongly. Like in my case, reading (...) then all of a sudden that’s gone. People say ‘well do something else’. But remember I’m an adult and you don’t become ‘something else’ readily!”

Environmental Factors

Learning Environment

- Learning alone vs with others
- Importance of relevant and motivating materials
- Role of practice and feedback
- Instructional techniques and strategies
- Duration and variety of learning activities
- Access to a braille user as mentor

Institutional Factors

- Awareness and availability of resources
- Response from the rehabilitation system

Instructor Characteristics

- Encouraging and positive attitude
- Influence of rapport and responsiveness

“I think it would have made a huge difference because if I had the braille display I probably would have made myself use it more with the computer and practiced a lot more. It would have opened a lot of doors for me but of course we don’t have any source of funding in Canada for that.”

“he brought me a Braille book, and I could not see the dots themselves, but I could see the shadow of the dots. And because I could see the shadows ... he said ‘No, you’re not ready’ and I almost cried I thought ‘This, this is it? I could learn, and read! I could learn to write ... I could touch paper again and you’re saying no?’, I was devastated!”

One of the biggest obstacles was that I tried to order some books in braille to practice when I first started learning braille (...) I thought, “Let me get some books that I can practice reading.” I remember it took almost a year for me to even get anything mailed to me so the availability of braille material for practice was non-existent. (...) So that first year, I didn’t really have any material to practice with beyond the textbook that they sent me and I think that discouraged me a little bit.

Social Factors

Sighted Community

- Response from sighted family, friends and colleagues
- Response from the general public

Blindness Community

- Response from the blindness / disability community
- Influence of knowing other braille users

There was a presumption that I would learn Braille. “Oh of course you’ll learn Braille!” And I have got to say it’s really funny, people almost feel “Oh, so you lose your vision you know how to read Braille !” Like it comes with the vision loss. (...) Expecting that you would learn Braille is not the same thing as encouraging you...]

“I felt at the time [braille] was drawing attention to myself and then everybody’s going to know why I can’t see and ... I hadn’t really met a lot of blind people myself so ... I didn’t really have any interaction, which is something personally I think is a lacking feature in Canada.”

“I mean I find even now having friends to come over and they bring me something, for instance, ‘Oh, look I brought you ginger tea, and look it’s labeled ginger tea’ (...) It’s these very small things, but I do think it’s very helpful.”

Conclusions

- Prior identity and learning experiences play a role, but are not routinely considered during the braille assessment process
- Training programs must consider the client’s support system and harness opportunities to address questions and stigma which family members may have
- Future research should address the potential influence of stigma towards braille and aging on professional decision-making
- Results provide context to understand the experiences, facilitators and barriers of older adults who learn braille to develop strategies that address existing gaps

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