Comparison of Assistive Technology Use and Beliefs Among Employed and Unemployed People Who Are Blind

What Were We Trying to Learn?

We focused on exploring whether assistive technology (AT) use, skill levels, training needs, and self-efficacy differed between employed and unemployed individuals who are blind or have low vision (B/LV). By analyzing these factors, we aimed to uncover potential barriers to employment and identify key areas where training or support could help B/LV job seekers improve their readiness for work in an increasingly digital workplace.

How Was This Project Carried Out?

We surveyed 325 participants, including 244 employed and 81 unemployed legally blind individuals. The participants reported on their use of AT, their perceived skill levels, and their need for training. The survey also measured their AT self-efficacy, or confidence in using new technologies. Data collection occurred in 2021 via an online survey or phone interview. Data analyses included descriptive statistics and group comparison techniques (t-test and Chi-square tests).

Research Takeaway

We found that both employed and unemployed B/LV individuals consider themselves highly skilled and confident with AT, but many have unmet training needs, including with computer access AT such as screen readers. Targeted AT training may improve job readiness for unemployed individuals.

What Are the Most Important Things We Learned?

- Braille proficiency was higher among employed participants, suggesting it may be a useful skill for job acquisition or retention.
- The most commonly used ATs in the workplace include screen readers, mobile apps, and optical character recognition (OCR) technology.
- Employed individuals were more likely to use screen reader software and refreshable braille displays, while unemployed individuals were more likely to use smartphone apps, including remote sighted assistance apps.
- AT training needs were high in both groups for certain workplace technologies, and unemployed participants reported higher training needs for screen readers and built-in computer accessibility features.
- A lack of significant differences in AT beliefs between employed and unemployed participants suggests that factors beyond AT skill level and confidence impact employment.
- Job seekers with B/LV may need targeted training in computer access AT to meet workplace demands.

How Do These Findings Relate to Me?

If you are a job seeker who is B/LV, this study highlights the importance of strong computer and AT skills, particularly for technologies like screen readers and OCR. For professionals, the research suggests that AT training should be tailored to prepare consumers for workplace demands. Employers and vision rehabilitation professionals can use these findings to improve workplace accommodations and training opportunities.

Learn More

Findings were taken from the following article:

McDonnall, M. C., Sergi, K., & Steverson, A. (2023). Comparison of assistive technology use and beliefs among employed and unemployed people who are blind. *The New RE:view*, *1*(2), 12-27.

For more information about this project, visit the project overview page.

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