

The Impact of Assistive Technology on Independent Living for Adults with Intellectual and Developmental Disabilities:

A Scoping Review

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BACKGROUND

- Individuals with intellectual and developmental disabilities (IDD) are less likely to live independently than typically developing adults due to challenges in performing activities of daily living (ADLs) and instrumental activities of daily living (IADLs) (Golisz et al., 2018).
- One solution to improve independent living skills for individuals with IDD is to increase access to and education on assistive technology (AT).
- Limited research exists on AT for independent living in individuals with IDD.

Question: What assistive technology increases independent living skills for individuals with IDD?

METHODS

A scoping review was conducted following PRISMA-ScR guidelines.

Inclusion criteria consisted of articles from 2010-2024 that are focused on AT for individuals ages 17 and older with an IDD.

Articles that were not peer reviewed or written in English were excluded.

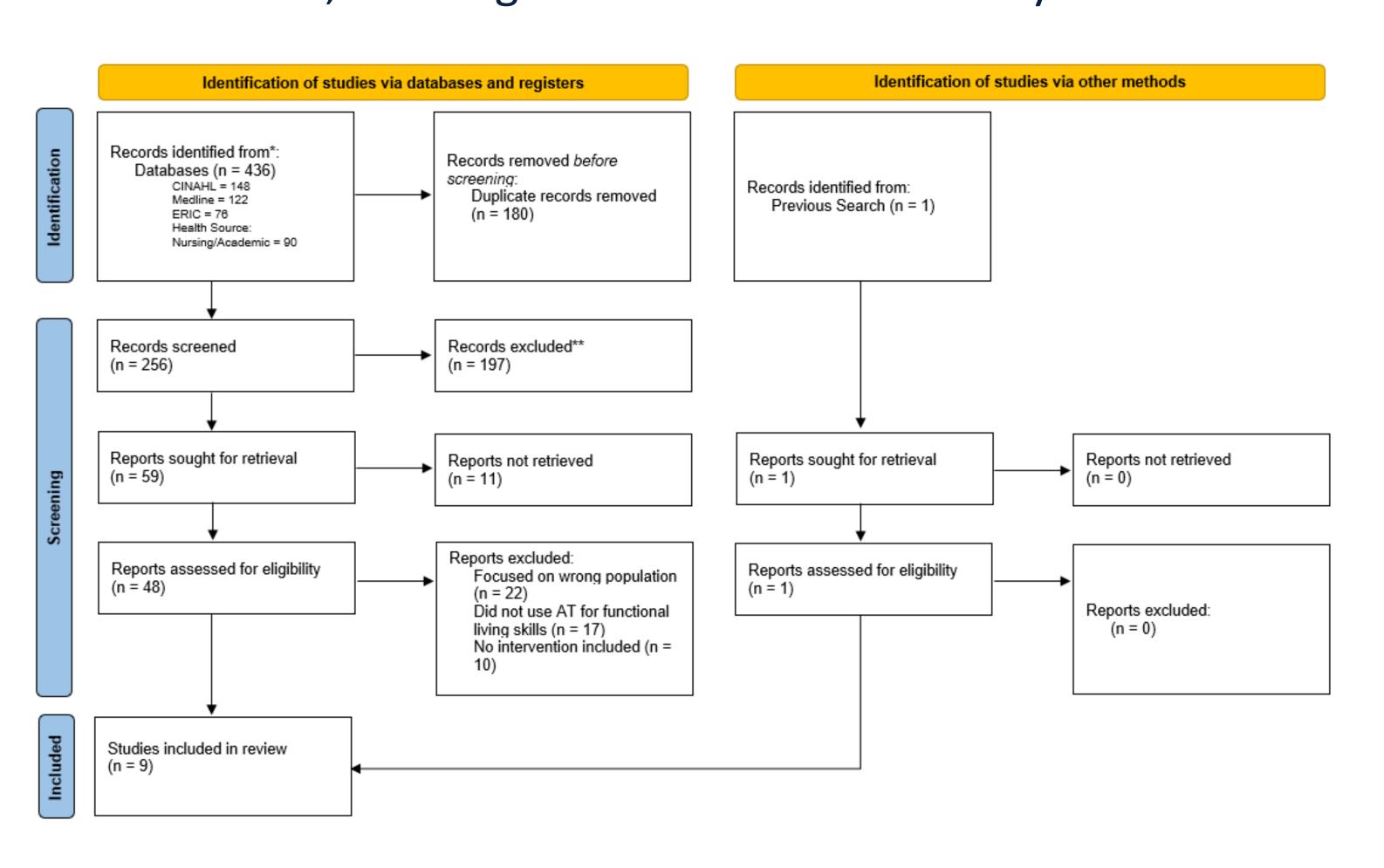
Databases searched through the EBSCO platform included ERIC, MEDLINE with Full Text, CINAHL Plus with Full Text, and Health Source:

Nursing/Academic Edition.

A data extraction chart was created to organize and synthesize the information from each research article.

RESULTS

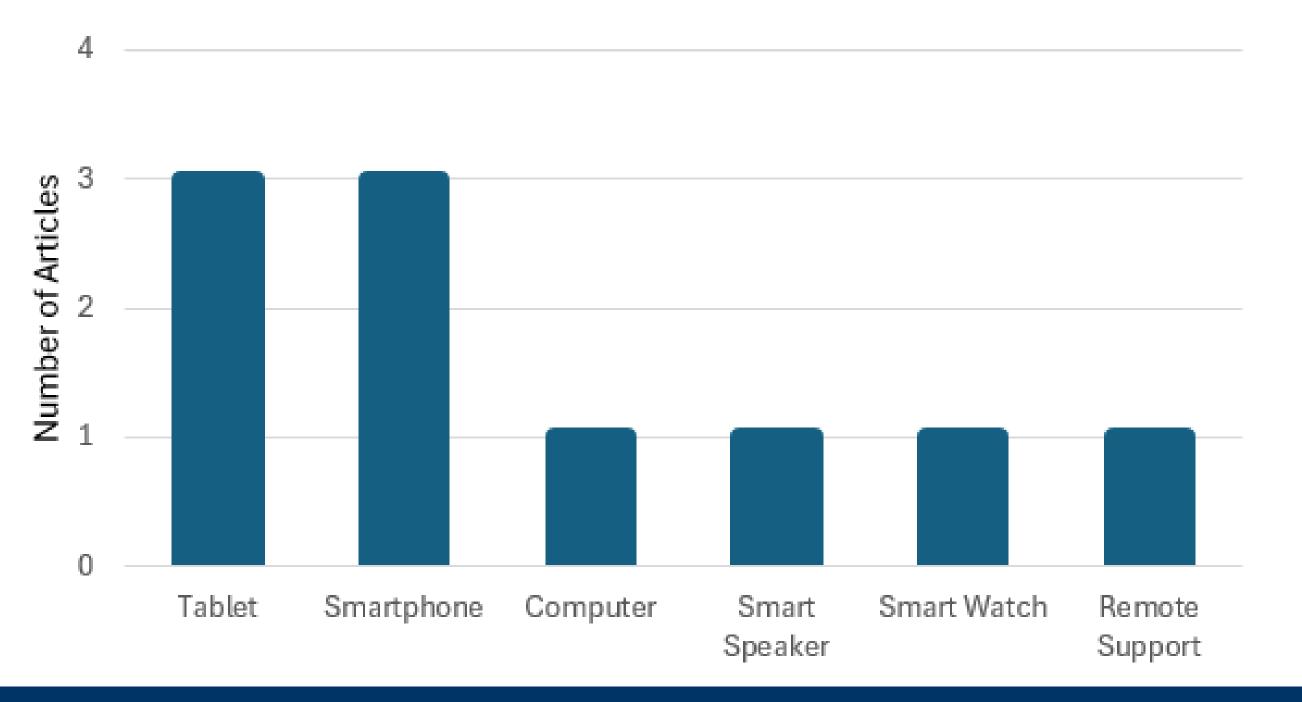
- The search strategy yielded 436 articles.
- Once duplicates were removed and the titles, abstracts, and full-texts were screened, eight articles were included.
- An additional article was included from a previous search, resulting in nine articles in the analysis.



DISCUSSION

- 6 types of AT were used to facilitate independent living skills for individuals with IDD.
- 4 themes were determined after synthesis of articles: type of assistive technology, functional living skills, living environment, and caregiver burden.
- Major skills facilitated with AT included general home safety, meal preparation, transportation, leisure, and following schedules for daily routines.

Type of Assistive Technology Utilized



IMPLICATIONS FOR OCCUPATIONAL THERAPY

- There is a need to provide ongoing education and training on AT to increase independent living skills, including ADLs and IADLs, for individuals with IDD.
- Occupational therapists are educated and trained in recommending appropriate AT based on an individual's strengths and needs for independent living.
- Occupational therapists can use a unique and personalized approach to help individuals with IDD use AT to live independently.

CONCLUSION

- Handheld technology, such as smartphones, tablets, and smart watches, were widely used forms of AT.
- AT can increase independence, self-efficacy, self-determination, and motivation in individuals with IDD.
- Further research is needed on training individuals with IDD on the use of AT for independent living.

Scan QR code for references:

