

Understanding adherence to assistive devices among older adults: A conceptual review

Joshua Tuazon,¹ BHSc (candidate) and Jeffrey Jutai, PhD^{1,2}

¹Interdisciplinary School of Health Sciences, University of Ottawa, ²Bruyère Research Institute

Introduction

- **Assistive devices (AD)** = physical tools applied to or used by an individual, like prostheses and walking/ hearing aids¹
- **Adherence** = extent to which recommendations from a healthcare professional are followed → considered necessary for positive health outcomes²
- Understand AD adherence (conceptualization) through thematic breakdown of factors that can predict use
- Specific attention needed for older adults

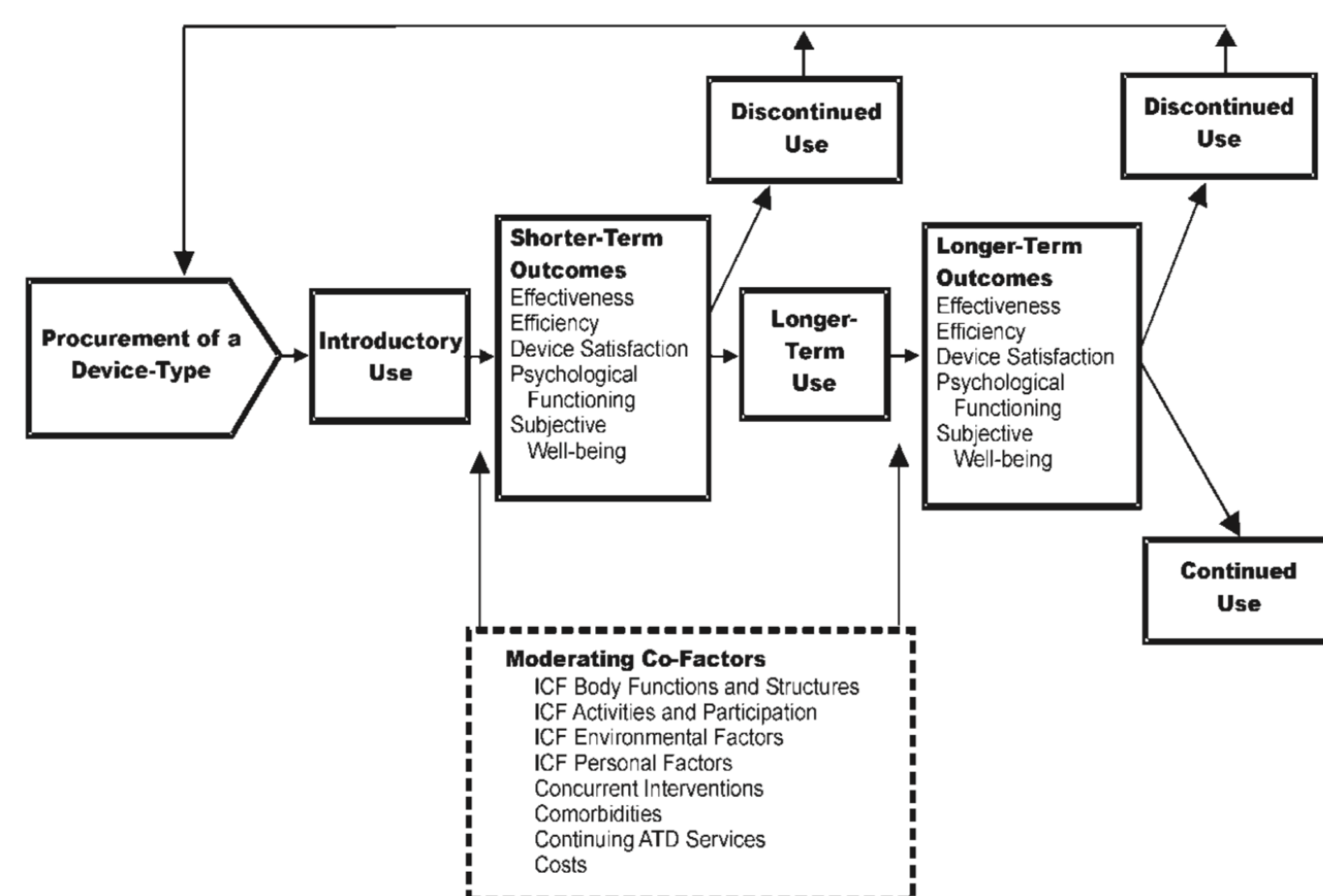


Figure 1. CATOR Framework.³

Aim

How is adherence to assistive devices among older adults conceptualized in the literature? How similar is it to the concept as applied to other health interventions?

Methods

Data Bases: MEDLINE, PubMed and CINAHL

Search terms and criteria: English articles were searched in (1990- 2017) for the following key words: “adherence”, “assistive devices”, “concept”, “compliance” and relevant synonyms.

Inclusion criteria: Articles were analyzed if they:
 (1) Attempted to define or conceptualize adherence to some degree
 (2) related to any assistive device dealing with
 (3) older adults aged 65 or older.

Search results summarized in Figure 2.

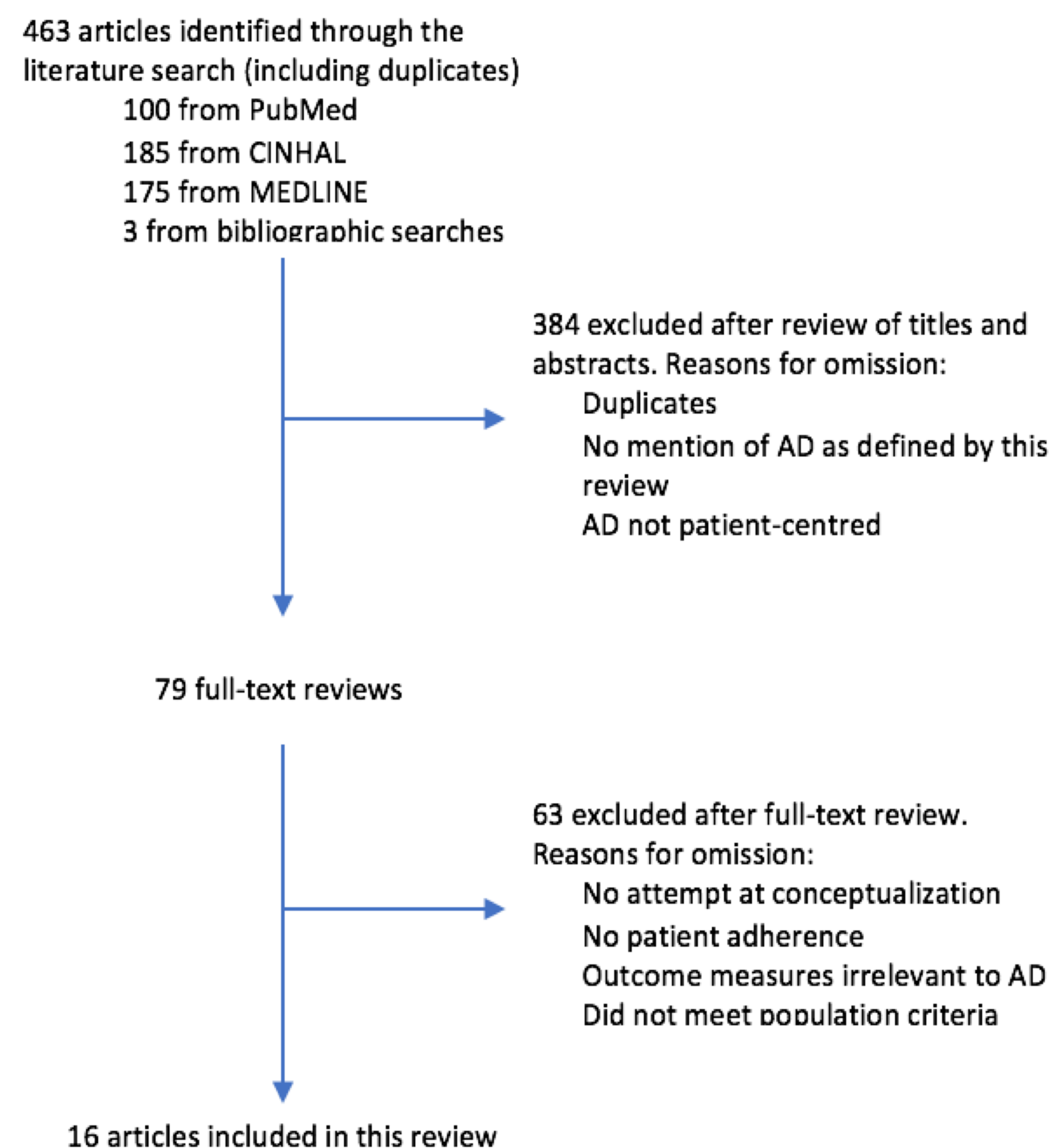


Figure 2. Search strategy.

Results

Table 1. Example of a summary of one article⁴.

Reference	Study design	AD Type	Study Population	Adherence	
				Defining term	Key Findings
Sakakibara et al. 2013	Pilot study	Manual wheelchair	20 novice wheelchair users	Participation	Definition contained domain of ‘confidence’. Improve confidence through skills training program. Confidence affected by Social Cognitive Theory

- Adherence to AD’s among older adults was not explicitly defined
- 3 robust themes of adherence to AD’s were found in the literature
- Each theme possessed unique sets of considerations:
 - 1) Psychological
 - Confidence, attitudes, perceptions
 - 2) Contextual
 - Collaborative communication
 - Physical and social environments
 - 3) Functional
 - Adaptability of the AD to any progression of the client’s conditions

Acknowledgments

Thank you to Dr. Jeffrey Jutai and Alhadi Jahan (PhD candidate). This project would not have been possible without their mentorship and encouragement throughout the program.

Conclusions

- Adherence to AD’s among older adults is complex and multidimensional
- **Psychological, contextual, and functional factors** related to AD use all affect the likelihood an individual will adhere to an AD recommendation
- In the clinical context, each core theme should be applied on a client by client basis because each element contains unique implications

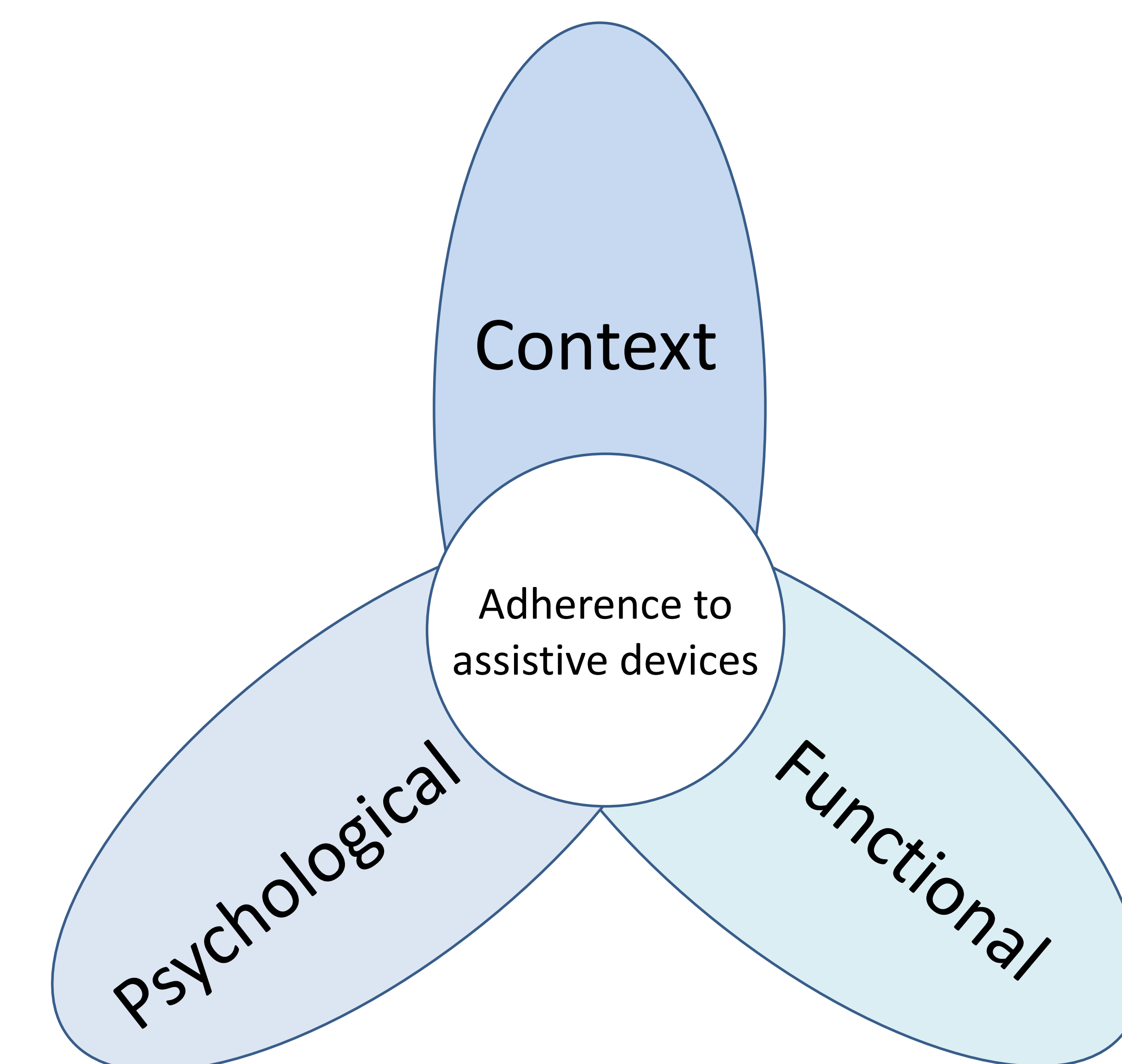


Figure 3. Proposed descriptive model for assistive device adherence among older adults.

- Similar conceptualization between AD and other health intervention like medication use
- Future research should study how these 3 elements work together to influence adherence
- Professionals who assess for, and recommend AD’s should foster a shared-decision making relationship with clients

Limitations

- The studies that were included in this review had small sample sizes
- Articles outside of publication date and language restrictions were not included

References

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Contact information: Joshua Tuazon, jtuaz028@uottawa.ca