GERAS DANCE for Brain Health and Mobility

Dancing towards better brain health: Virtual GERAS DANCE implementation for dementia care across Canada

Patricia Hewston[ab], Caroline Marr[ab], Ali Dashti[ab], Genevieve Hladysh[c], Esther Coker[ad], Joye St. Onge[ab], George Ioannidis[ab], Courtney Kennedy[ab], Alexandra Papaioannou[abe]

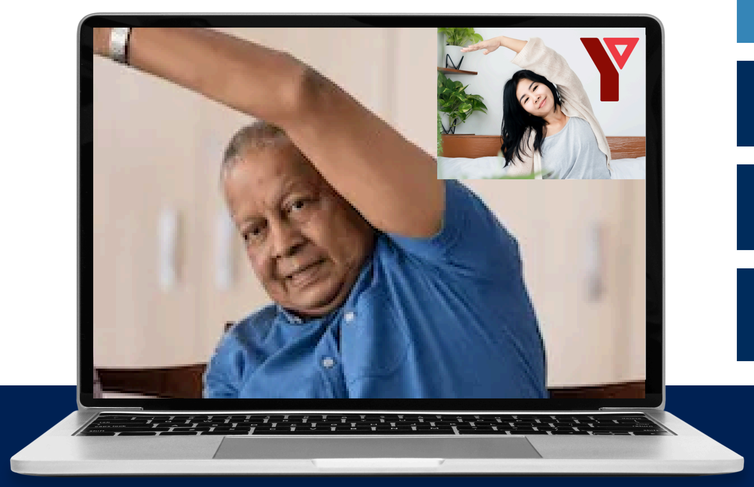
[a]Geras Centre for Aging Research; [b]Department of Medicine, McMaster University; [c]YMCA of Hamilton|Burlington|Brantford; [d]School of Nursing, McMaster University; [e]Department of Health Research Methods, Evidence, and Impact, McMaster University; Hamilton Health Sciences

OBJECTIVE

- To explore strategies for successful implementation of **virtual adaptation of GERAS DANCE**, a specialized evidence-based program shown to improve brain health and mobility in older adults, across diverse settings in Canada.

METHODS

- **Research framework:** Consolidated Framework for Implementation Research (CFIR) [1]
- **Participants:** 22 healthcare professionals who were involved in the implementation of virtual GERAS DANCE to 135 older adults at 12 diverse sites.
- **Virtual GERAS DANCE intervention:**
  - Collaborative community approach wth live-streamed sessions from the YMCA of Hamilton Burlington Brantford and on-site support staff at each diverse site across Canada.
  - Twice-weekly, 1-hour sessions for 6 weeks.
- **Data collection:** Surveys and semi-structured interviews after 6 weeks of virtual GERAS DANCE.
- **Analysis:** Descriptive statistics and identification of influential constructs with a cross-case comparison of the CFIR constructs including the outer setting, inner setting, individual characteristics, implementation process & innovation characteristics.



RESULTS

Figure 1. Participant Flow Diagram

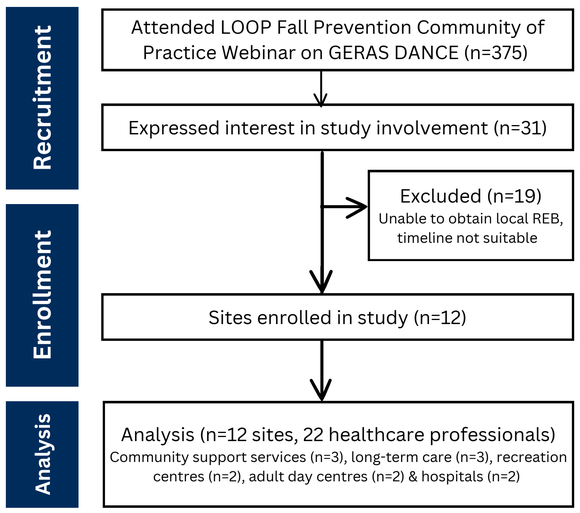


Figure 2. Survey Results

93% Rated virtual GERAS DANCE as good to excellent

100% Rated the instructors as good to excellent

100% Enjoyed the music selection

93% Would recommend virtual GERAS DANCE

100% Recommended it for tailored exercise

100% Recommended it for fun / elevated mood

75% Recommended it for social engagement

Figure 3. Consolidated Framework for Implementation Research Interview

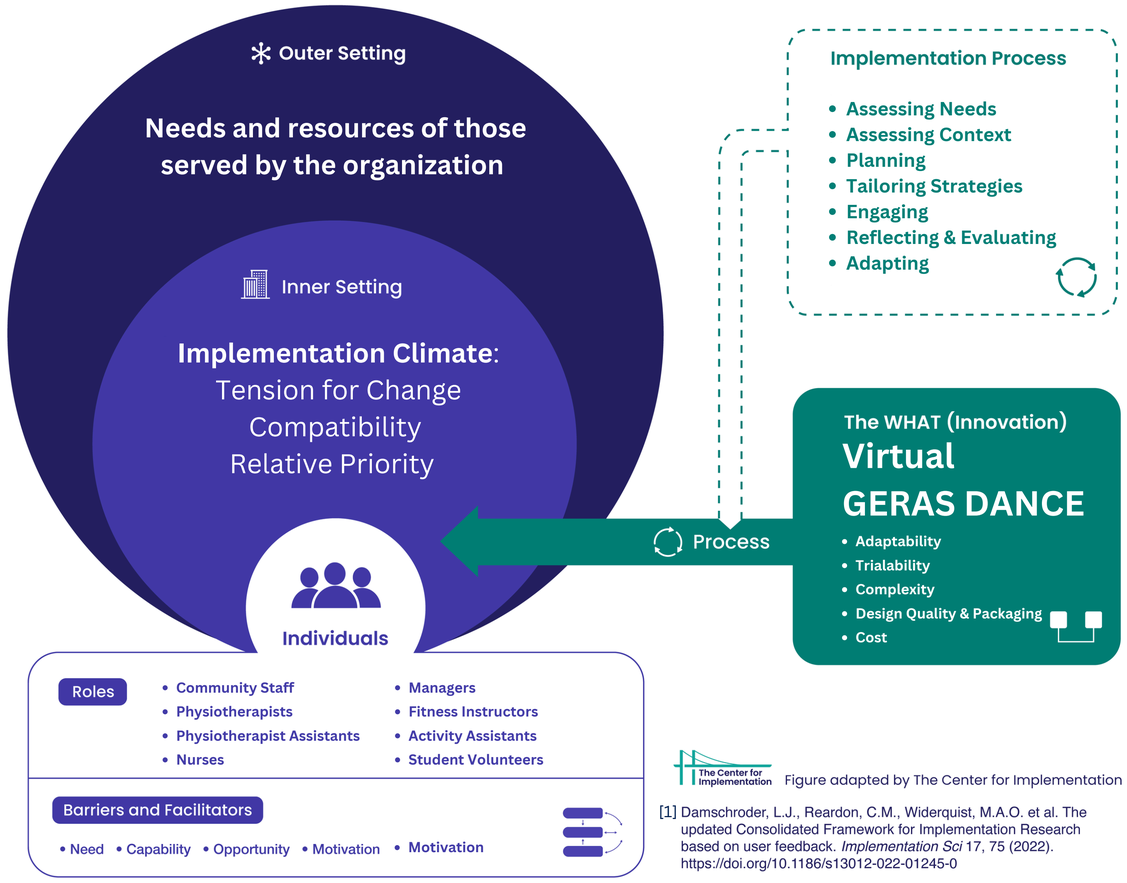


Figure adapted by The Center for Implementation

[1] Damschroder, L.J., Reardon, C.M., Widerquist, M.A.O. et al. The updated Consolidated Framework for Implementation Research based on user feedback. *Implementation Sci* 17, 75 (2022). https://doi.org/10.1186/s13012-022-01245-0

DISCUSSION

- Virtual GERAS DANCE's appealing elements (e.g., **enjoyable music, exercise** and **dementia-friendly elements)** were strong motivators for program adoption, supported by staff readiness and high demand for virtual programs.
- Within the participating organizations (inner setting) we used live-streamed certified GERAS DANCE instructors and onsite support staff which facilitated rapid and user-friendly implementation.
- Strategies to engage **individuals with late-stage dementia** included using personalized music, shorter and more frequent sessions, and multisensory elements to sustain attention.

Thank you to all the participants for their time and willingness to participate in the research. Study costs were supported by CABHI SparkON Grant and the AGEWELL Emerging Entrepreneur Award. PH, CK, GI, and AP are co-developers of the GERAS DANCE intervention with McMaster University with a registered Canadian Copyright #1156625 and Trademark #0925641