

SSC-IRG Track 2: Smart Social Connector: An Interdisciplinary, Collaborative Approach to Foster Social Connectedness in Underserved Senior Populations Year 2

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IRG, FY2020

The Smart Social Connector project is driven by integrative and interdisciplinary research among social sciences, computer science, engineering, and scholarship of engagement to foster **social connectedness** of seniors in El Paso, Texas through a strategic partnership among The University of Texas at El Paso, El Paso Community College, and the City of El Paso.

Problem. Technology can foster social connectedness through online services and mobile applications. However, several factors, including lack of technological skills, limited awareness, and accessibility issues hinder seniors' use of technology-enabled services and resources, creating a generational digital divide that may contribute to social isolation [1]-[3].

Intellectual merit. The Smart Social Connector aims to develop and sustain the social connectedness (i.e., physical and technology-enabled social relations) of seniors to improve their quality of life through the intersection of technology, community engagement, and social sciences. In collaboration with stakeholders, this community-based participatory research project will: (i) advance knowledge on the systemic and behavioral factors that increase social connectedness and bridge the generational digital divide in seniors; and (ii) increase social and technological connectedness for seniors through Smart City solutions.

Activities to Date

- Investigating what **factors contribute to the learning and adoption of new technologies** among seniors through older adults' instructors and older adults' study.
- Defining methods (e.g., teamwork to build/nurture social networks) and best practices (e.g., guidelines for information sharing and privacy) that contribute to **meaningful connections** in older adults.



- **Engagement of CAB members** for feedback in the project's activities.
- **Student training** to acquire knowledge and skills for human subjects research, interdisciplinary research, and development of Smart Cities solutions.
- **Dissemination** of findings and outcomes from this project in a regional conference for older adult care providers, a peer-reviewed publication [4], and through community engagement.
- Designing the **Living Lab** infrastructure and a Smart City solution.

Broader Impact (short term)

- Addressing the fundamental need to connect seniors who are isolated by promoting a sense of belonging to their community through the learning and adoption of technology, advancing their health and welfare.
- Supporting seniors in strengthening their social connectedness and increasing their technology self-efficacy.

(long term)

- Contributing to the shift of attitudes and behaviors toward seniors by restoring their visibility and participation in their community.
- The outcomes and lessons learned from the project have the potential to be applied in other cities that need to address the generational digital divide to improve seniors' quality of life.



Next steps (the next 12 months) include continuing to:

- Advance knowledge on systemic and behavioral factors, activities, and best practices that increase connectedness in older adults through a human subjects study and course activities.
- Develop Smart City solutions and Living Lab infrastructure.
- Grow and strengthen our network of community partners.
- Evaluate attitudes towards aging and the effectiveness of community engagement.
- Disseminate the outcomes of this project.

References

- [1] T. N. Friemel, "The digital divide has grown old: Determinants of a digital divide among seniors", *New Media & Society*, vol. 18, no. 2, pp. 313–331, Feb. 2016.
- [2] N. Charness and W. R. Boot, "A Grand Challenge for Psychology: Reducing the Age-Related Digital Divide", *Curr Dir Psychol Sci*, vol. 31, no. 2, pp. 187–193, Apr. 2022.
- [3] L. Gitlow, "Technology Use by Older Adults and Barriers to Using Technology", *Physical & Occupational Therapy In Geriatrics*, 32:3, 271-280, Aug. 2014.
- [4] A. Bangert, G.G. Nunez-Mchiri, O. A. Mondragon, D. Calvo, C. Ruiz, E. Escobedo, N. Villanueva Rosales, R. Long-Cheu, "Using Technology to Teach Older Adults during the COVID-19 pandemic", *Proc. Of the IEEE International Smart Cities Conference*, Sep. 2022.