SSC-IRG Track 2: Smart Social Connector: An Interdisciplinary, Collaborative Approach to **Foster Social Connectedness in Underserved Senior Populations Year 3**

Natalia Villanueva Rosales (PI), Ashley Bangert (Co-PI), Oscar Mondragon (Co-PI), The University of Texas at El Paso Araceli Guerra (Co-PI), City of El Paso; Mary Yañez (Co-PI), El Paso Community College **IRG Award# 1952243**

Challenge

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]-[4].

Intellectual Merit

The Smart Social Connector aims to develop and sustain the social connectedness of older adults 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 increase that social connectedness and bridge the generational digital

divide in seniors; and (ii) increase social and technological connectedness

for seniors through Smart City solutions.

Broader Impact

- Address the fundamental need to connect older adults to their community and each other (social connectedness) and restore their visibility through the learning and adoption of technology (technical self-efficacy).
- The outcomes and lessons learned from the project can inform service providers and the designers of technology about the unique needs and factors that influence the use and adoption of technology by older adults.

- •Investigating what factors contribute to the learning and adoption of new technologies among seniors through older adults' instructors and older adults' study.
- •Developing and testing the El Paso Accessibility Smart City solution focused on Smart Mobility and accessibility to engage older adults through crowdsourcing and gamification techniques.
- for input on the project's activities.
- Student training to acquire knowledge and skills for human subjects research, interdisciplinary research, and development of Smart Cities solutions.
- •Disseminating of findings and outcomes in a cognitive psychology regional conference, two STEM conferences, and an outreach activity.
- •Creating activities that were integrated into two courses delivered at El Paso Community College Senior Adult Program.
- •Designing the Living Lab infrastructure, testing of El Paso Accessibility solution, and designing the second Smart City Solution.
- •Defining strategies tor sustainability of the Living Lab infrastructure with the City of El Paso.

Fig. 1. Smart Social Connector – Human and technical infrastructure.

2024 S&CC Principal Investigators' Meeting February 28 - 29, 2024



Activities to Date

• Engaging of Community Advisory Board members

deployment the and



Continue to:

- Living Lab infrastructure.
- the sustainability of the project's outcomes.
- of community engagement.



- 313–331, Feb. 2016.
- no. 2, pp. 187–193, Apr. 2022.
- 280, Aug. 2014.

Next Steps

•Advance knowledge of systemic and behavioral factors, activities, and best practices that increase connectedness in older adults through technology.

•Develop and deploy Smart City solutions and

•Strengthen our community partnerships to increase community engagement and define strategies for

• Evaluate attitudes towards aging and the effectiveness

• **Disseminate** the outcomes of this project.

Fig. 2. Dissemination activities.

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.

[2] N. Charness and W. R. Boot, "A Grand Challenge for Psychology: Reducing the Age-Related Digital Divide", Curr Dir Psychol Sci, vol. 31,

[3] L. Gitlow, "Technology Use by Older Adults and Barriers to Using Technology", Physical & Occupational Therapy In Geriatrics, 32:3, 271-

[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.