
CONFERENCE ABSTRACT

“Project Wire Up” – A Digital Access and Literacy Program for Effective Psychosocial Engagement of Older Adults in Singapore

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Introduction

Social distancing measures were implemented to manage the COVID-19 pandemic. However, these measures have exacerbated social isolation and loneliness in older adults, thus adversely affecting their psychological, social, and physical health. While digital solutions like teleconferencing and tele-befriending can be effective in mitigating the pandemic's impact, uptake of new technology by older adults in Singapore is limited. "Project Wire Up" arose as a ground-up initiative by volunteers from TriGen(nonprofit organization) during the pandemic, in collaboration with Singapore General Hospital(Academic Medical Centre). It aims to address loneliness and social isolation in older adults through digital access and literacy.

Aims Objectives Theory or Methods

The program adopts a three-pronged approach: equip, train, connect. Older adults are Equipped with smartphones, Trained by volunteers for six sessions over three months, and digitally Connected to social networks. Digital skills training is guided by a tiered curriculum of increasing difficulty and contextualized to the needs of older adults. A sequential mixed-method, quasi-experimental pre-post study was conducted to evaluate the program's impact. Primary outcomes include perceived loneliness(University of California, Los Angeles' three-item Loneliness Scale[UCLA-3]), social connectedness(Lubben Social Network Scale-6[LSNS-6]) and self-reported smartphone usage(phone usage scale). Paired t-tests and Wilcoxon sign-rank tests were used at a significance level of 0.05.

Highlights or Results or Key Findings

The study is ongoing. To date, 150 older adults(Range: 57-88yrs) have participated in the study, with 115(M=73.7, SD=9.40) in the Intervention group and 35(M=71.2, SD=7.20) in the Control group. Majority were females(Intervention=52.2%,Control=65.7%), staying alone (Intervention=61.1%,Control=45.7%), and had primary school education or less(Intervention=73.7%, Control=71.4%). Prior to the study, approximately one-third did not own smartphones/mobile phones(Intervention=39.1%, Control=32.4%). For smartphone use, older

adults reported significantly higher smartphone usage ($Z=-2.44$, $p=0.02$) post-program (Median=11) than pre-program (Median=6). No significant change was observed in the Control group on smartphone usage. There was no significant difference in perceived loneliness and social connectedness between pre- and post-test across the groups yet.

Preliminary findings from in-depth interviews with participants ($n=21$) suggest that while older adults valued the personalized training curriculum and social exchanges with volunteers, age-related cognitive and physical limitations, design of smartphones, literacy and language barriers, and internalized ageism may hinder their perceived self-efficacy and motivation to learn.

Conclusions

Preliminary findings suggest a digital literacy program that addresses the diverse needs, capabilities and concerns of older adults can effectively increase older adults' smartphone use and digital skills. Further analysis upon completion of the study is required to ascertain the program's impact on perceived loneliness and social connectedness.

Implications for applicability/transferability sustainability and limitations

Strengths of the study include the multiethnicity of participants, a replicable three-prong approach adopted in program implementation and use of a mixed-method design. Limitations include a non-randomized design, small number of participants, especially in the control group. Findings from the study can inform interventions adopted in population health.