

Mapping the Dynamic Complexity of Social Isolation among Older Adults in Singapore

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Background: Social Isolation among older adults is an increasingly prevalent social phenomenon linked to negative health outcomes. Socially isolated older adults have lower quality of life, are at a higher risk of incident coronary heart disease, acute myocardial infarction (AMI) or stroke, levels of mortality after AMI or stroke, and incidence of diabetes. (Hakulinen 2018) This study aims to develop a causal map of the dynamic complexity of social isolation among older adults, allowing us to incorporate feedback perspectives to inform system-wide interventions.

Methods: Using Causal Loop Diagrams (CLDs) based on Systems Dynamics Methodology, we uncovered and analysed the pathways of social isolation through emergent themes that are most salient to participants. Qualitative interviews were conducted with 21 older adults, who were recruited through their involvement in community Senior Activity Centres (SACs). The pathways of social isolation were inductively mapped as understood and articulated by participants and their key factors, and how they influence each another, using Nvivo software (Release No. 1.4).

Results: We identified 4 domains and found that 12 reinforcing loops and 1 balancing loop were found to be significant, along with one foundational feedback loop on social isolation which was supported by literature as cited (Cacioppo 2008). The 4 domains include (i) Health and Wellbeing, (ii) Income and Unemployment, (iii) Relationships with Family and Friends, and (iv) Personality and Behaviour, each consisting of specific pathways affecting and leading to social isolation.

Conclusion: Addressing social isolation among older adults will need a deeper understanding of the causal mechanisms that drives the widespread incidence of social isolation. A qualitative system dynamics model can serve as a boundary object that can be used for future quantitative systems dynamics modelling and can further engage stakeholders to develop and guide the identification of leverage points for targeted interventions.

References:

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