Enhancing Convenience within Housing Spaces for Older Adults in Hong Kong: A Qualitative Investigation of Users' Viewpoints on Technology Adoption

IINTRODUCTION

- Hong Kong is among the world's most densely populated cities.
- Housing shortages reduce daily living convenience and comfort.
- Poor housing satisfaction links to mental health issues like anxiety.
- Existing research cites key factors: home size, design, building quality, resident traits, housing type & tenure.

(Chan et al., 2021; Addo, 2016; Tran & Van Vu, 2018)

RESEARCH GAP

❖ Despite substantial work on housing satisfaction and residential well-being,
❖ Technology and digitalisation in housing convenience are underexplored.
❖ Rapid advances in technology, especially AI, are transforming the real estate sector.
❖ Technology-driven solutions can: enhance daily living, support ageing-in-place, and potentially mitigate housing-related challenges for older adults.
❖ Timely need to understand how older adults themselves view such technologies.

(Wei et al., 2022; Zhou et al., 2021; Zou & Zhu, 2021)

AIM &SDG CONTRIBUTION

❖ To empirically investigate the benefits of adopting technology to enhance convenience for older adults in Hong Kong Elderly Housing Schemes.

❖ SDG 11 – Sustainable Cities and Communities.
- Safe, inclusive, resilient, and sustainable housing environments.

❖ SDG 3 – Good Health and Well-being
- Improved mental health and life satisfaction through enhanced convenience.

RESEARCH QUESTIONS

1. What challenges common to older adults within their housing space limit their convenience in Hong Kong Elderly Housing Schemes?
2. In what ways can these identified challenges be mitigated using digital technologies in Hong Kong?
3. How do older adults perceive digitalized means of improving convenience within Hong Kong Elderly Housing Schemes?

THEORETICAL BACKGROUND

❖ Physical housing characteristics (e.g., size, interior design) are associated with convenience and housing satisfaction.
❖ Housing satisfaction is linked to life satisfaction, particularly among older adults.
❖ Housing conditions in Hong Kong have been associated with mental health issues.
❖ Emerging evidence on technology:
❖ AI and smart technologies linked to improved well-being in communities (e.g., Shenzhen)
❖ ICT can enhance sustainability and community cohesion.
❖ Smart solutions (e.g., parking systems) can address persistent urban challenges.

12-MONTH RESEARCH TASK TIMELINE BREAKDOWN

Step 1. Review of Extant Literature (Months 1–3)
- Review of literature on self-help mechanisms to manage housing challenges within housing spaces.
- Review of literature on the application of technology and digitalization in improving housing satisfaction.

Step 2. Data Collection (Months 4–5)
- Design of semi-structured interview guide questions.
- Observation and Semi-structured interview with older adult population.

Step 3. Data Analysis (Months 6–9)
- Data analysis on challenges faced by older adults within their housing spaces that limit their housing satisfaction.
- Data analysis on self-help mechanisms deployed by older adults.
- Data analysis of perception and acceptability of older adults for digitalised solutions.
- Thematic content analysis.
- Systematic thematic analysis.

Step 4. Reporting of Research Results/Findings (Months 10–11)
- Reporting on challenges of older adults and their self-help mechanisms.
- Reporting on the digitalised self-help mechanisms and the perception/acceptability of older adults.

Step 5. Final Reporting on Research Work (Month 12)
- Final report production on the study.

METHODOLOGICAL APPROACH

❖ Overall design: Mixed-methods, with a strong qualitative component

❖ Key components:
- Extensive literature review
- Semi-structured interviews with older adults
- Personal observations within housing environments

❖ Rationale:
- Need for in-depth understanding of older adults' experiences and perceptions
- Questionnaire-only approaches may constrain expression and limit the depth of data

(Choy, 2014; Alam, 2021; Hong-Kong-Government, 2016; WHO, 2024)

STUDY POPULATION AND SAMPLING

❖ Target population: Older adults (≥60 years) residing in Hong Kong Elderly Housing Schemes

❖ Strata include:
- Age-friendly housing
- Housing for Senior Citizens (HSC)
- Single Elderly Persons Priority Scheme (SEPPS)
- Elderly Persons Priority Scheme (EPPS)
- Public Rental Housing with priority for older adults
- Harmonious Families Priority Scheme (HFPS)
- Joyous Living Scheme (JLS)
- Senior Citizen Residence Scheme (SEN)

❖ Sampling strategy:
- Purposive stratified random sampling
- Approx. 5 older adults per stratum (≥60 years)

DATA COLLECTION AND ANALYSIS

- Semi-structured interviews with older adults
- Personal observations of housing spaces and daily routines

❖ Analysis:
- Thematic content analysis
- Use of Computer-Assisted Qualitative Data Analysis Software (NVivo)
- Systematic coding and theme development (supported by Excel)

❖ Quality and trustworthiness:
- NVivo used to enhance the dependability and credibility of findings
- Transparent coding and audit trail

(Akinwande et al., 2024; Leech & Onwuegbuzie, 2011; Wong, 2008)

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