

# Transitions in Social Network Types among Older Singaporeans, Mobility Constraints and Implications to Life-space Studies

**Dr Pildoo Sung**, Research Fellow

**Dr Ad Maulod**, Senior Research Fellow

**Mr Wong Yunjie**, Research Assistant

Centre for Ageing Research & Education, Duke-NUS Medical School

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# Transitions in Social Network Types over Time among Older Adults

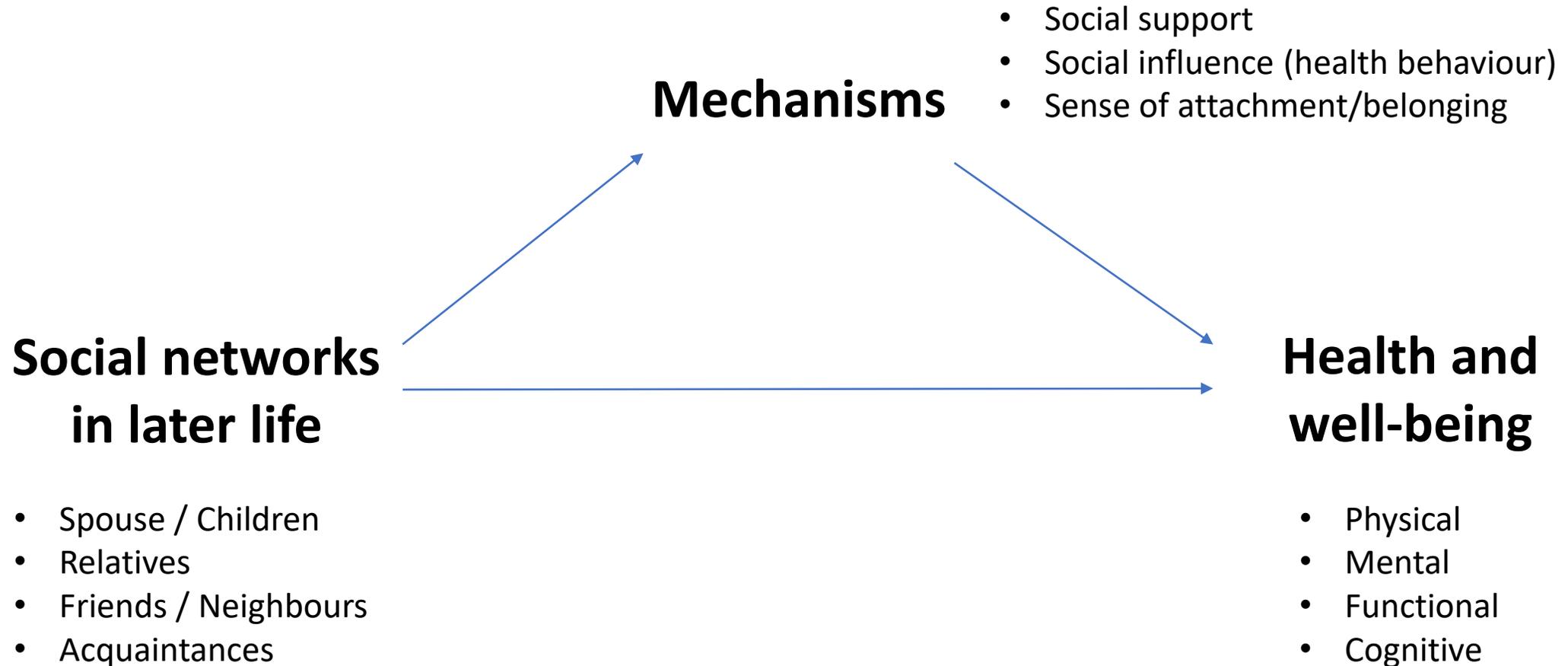
Pildoo Sung<sup>a</sup> Rahul Malhotra<sup>a, b</sup> Grand H.-L. Cheng<sup>c</sup>  
Angelique Wei-Ming Chan<sup>a, b</sup>

<sup>a</sup>Centre for Ageing Research and Education, Duke-NUS Medical School, Singapore, Singapore;

<sup>b</sup>Health Services and Systems Research, Duke-NUS Medical School, Singapore, Singapore;

<sup>c</sup>School of Arts and Social Sciences, The Open University of Hong Kong, Hong Kong, Hong Kong SAR

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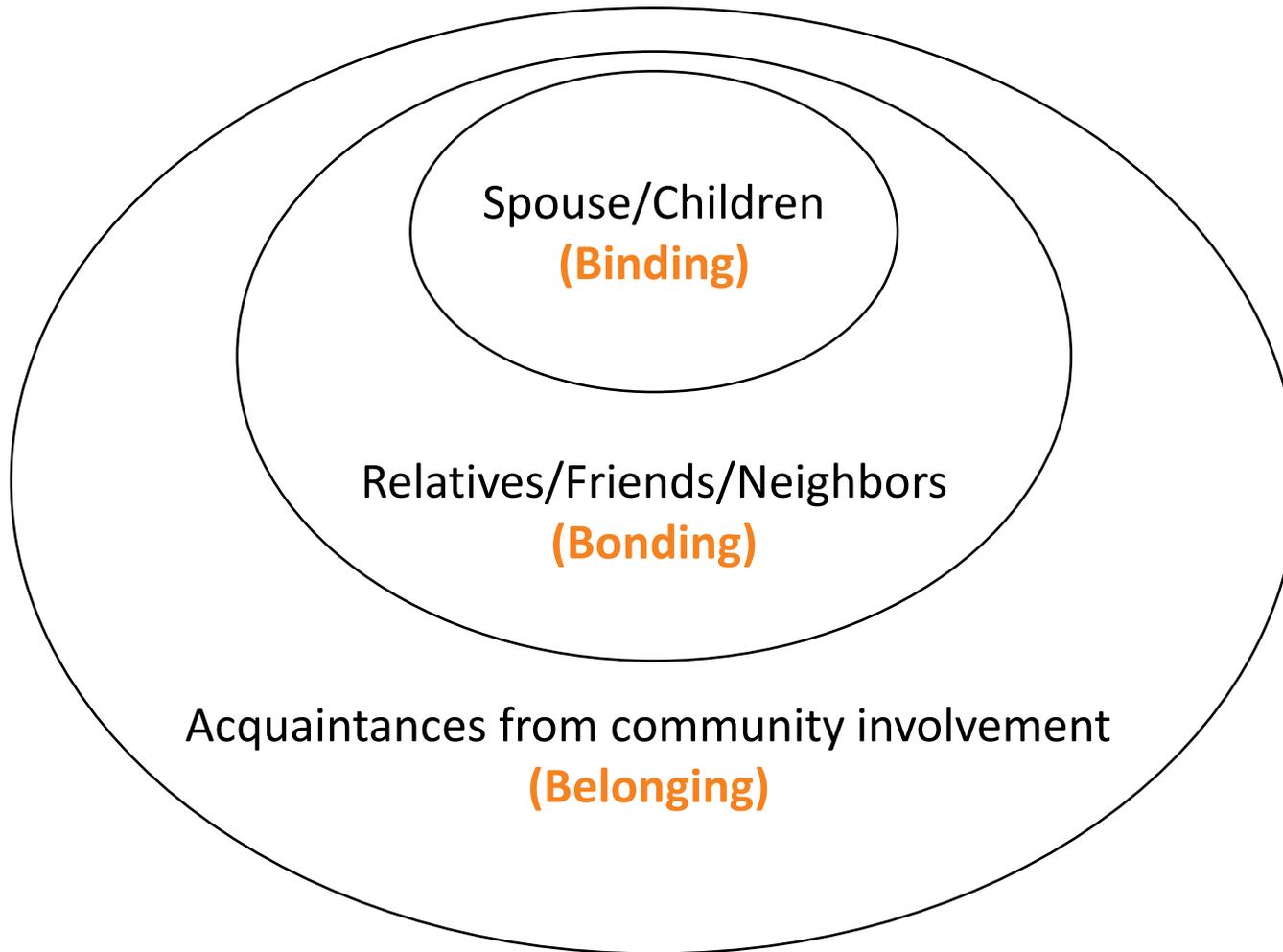


## Composition

- How can we consider multiple elements of social networks comprehensively?

## Dynamics

- Do older adults' social networks change over time?



## Four types of social networks

- Diverse & socially engaged
- Friend-oriented
- Family-focused
- Restricted

## Disengagement and selectivity

- Socioeconomic selectivity theory
- Social convoy model

**VS**

## Fluctuation and continuity

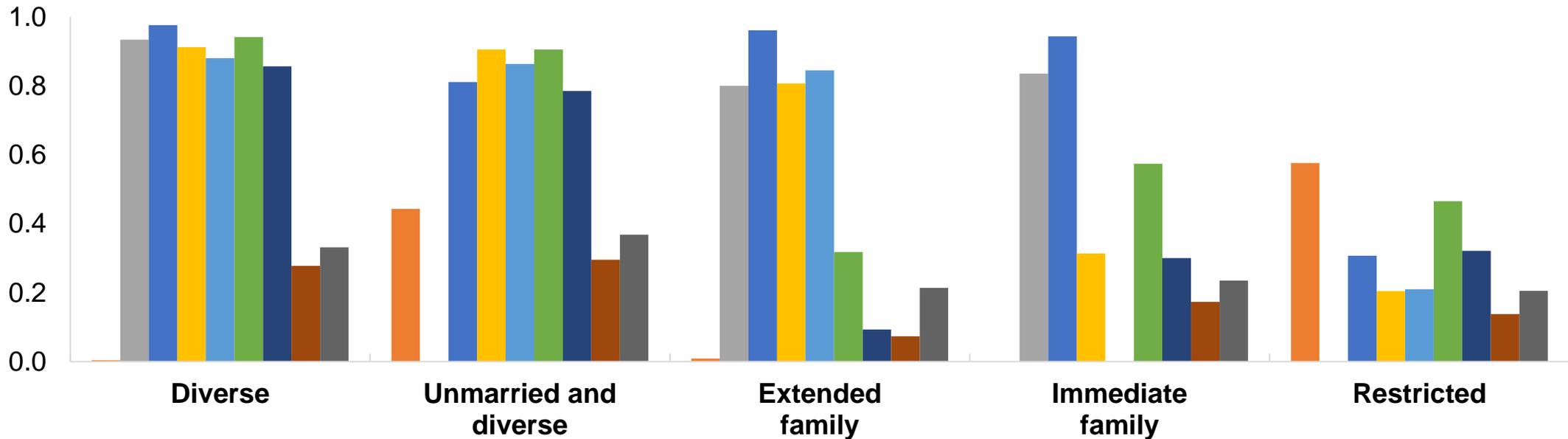
- Cultivation of new ties
- Stability and rebalancing

## This study aims to

- 1) Identify **distinct types of social networks** among older Singaporeans
- 2) Explore **stability and change in social network types** over time
- 3) Examine **factors associated with changes in social network types**

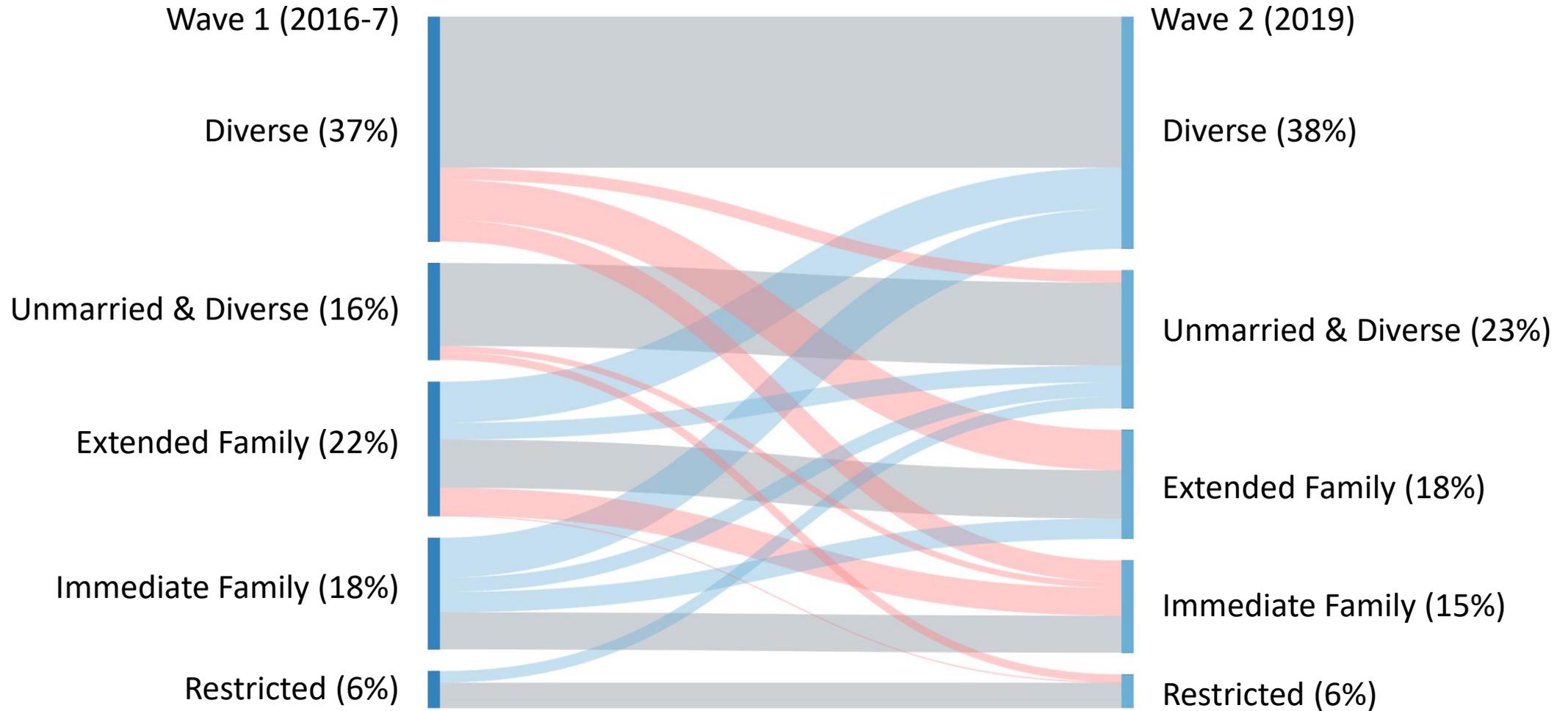
- Data on 1,305 older adults from the two waves of the Transitions in Health, Employment, Social engagement and Inter-Generational transfers in Singapore Study (THE SIGNS study)
- Latent transition analysis (LTA) identifies social network types and their stability and change between waves.
- Multinomial logistic regression examines factors associated with network transitions.

# Five social network types



- 1. Living alone
- 2. Married
- 3. Have one or more living children
- 4. Three or more relatives to contact
- 5. Frequent contact with relatives
- 6. Three or more friends to contact
- 7. Frequent contact with friends
- 8. Ever attend community events
- 9. Weekly attend religious services

# Transitions between waves



**57%** retained; **19%** contracted; **24%** expanded

# Factors associated with transitions

	Model 1		Model 2	
	Network contraction: Transition to less diverse types		Network expansion: Transition to more diverse types	
	RR <sup>a</sup>	95% CI <sup>b</sup>	RR	95% CI
<b>Change in health from wave 1 to wave 2</b>				
Change in the number of chronic diseases	0.89	[0.76,1.03]	0.99	[0.87,1.14]
Change in the number of functional difficulties	<b>1.14*</b>	[1.01,1.30]	1.05	[0.93,1.19]
Change in depressive symptoms	<b>1.09***</b>	[1.04,1.15]	0.96	[0.90,1.02]
<b>Health status at wave 1</b>				
Chronic conditions	1.00	[0.90,1.11]	1.05	[0.96,1.15]
Functional difficulties	0.91	[0.79,1.05]	1.06	[0.94,1.19]
Depressive symptoms	<b>1.07*</b>	[1.01,1.14]	1.01	[0.95,1.07]
<b>Sociodemographic characteristics at wave 1</b>				
Age	<b>1.03*</b>	[1.01,1.05]	1.01	[0.99,1.03]
Female	<b>0.47***</b>	[0.34,0.64]	<b>0.67**</b>	[0.51,0.89]
Minority	1.23	[0.87,1.73]	1.25	[0.91,1.72]
Education	<b>0.85*</b>	[0.72,1.00]	0.97	[0.84,1.11]
Working	1.39	[0.98,1.97]	1.32	[0.98,1.80]
Small housing	0.64	[0.35,1.15]	0.77	[0.47,1.25]

## **Five social network types in Singapore**

- Importance of extended family networks
- Emergence of the unmarried and diverse type

## **Transition in social network types**

- Around half changed their social network composition
- More people expanding their networks than losing it

## **Factors associated with social network contraction**

- Older, less educated, and those with worsening functional and mental health were more likely to transition into less diverse types

# Meaning and Experience of Life-Space Mobility and Impact on Social Networks and Participation: Case Study of Vulnerable Older Persons with Restricted Mobility

**Life-space mobility:** Assesses functional, environmental and social factors that affect how older persons live their day-to-day lives.

- *Progressive restriction* Individuals consciously limit their life-spaces in response to functional and cognitive declines to cope with environmental demands and to maintain control and competence over the living environment ([Lawton, 1985](#); [Lawton and Nahemow, 1973](#)).
- *Immediate geographical life-space levels* The home and immediate neighbourhood becomes the centre stage for older persons' experiences and especially meaningful to them ([Hodge, 2008](#); [Sixsmith et al., 2014](#)).

**Life-space activity: Social networks and social participation**

- How a person lives, gets out and about, interacts, participates, conducts his or her societal roles, and engages in activities in the course of everyday life ([Hodge, 2008](#); [Horgas et al., 1998](#); [Liddle et al., 2014](#)).
- Motivation for social, work and family engagements → care-giving and care-seeking behaviour (Elaine Ho et al, 2021)
- Life-space and quality of life is correlated with one's capacity to move in order to *participate* in the activities above to maintain subjective wellbeing and life purpose

**Recognizing older persons' self-determination and agency in shaping life-space outcomes**

- Case studies of **five older persons** residing in public rental housing in the aftermath of losing their mobility
- How they make sense of mobility constraints, existing environmental and social barriers and their life-space experience

# Losses in mobility exacerbates precarity for economically/ socially disadvantaged older persons



## Mdm Salmah, 85, Malay

- “British Amah”/ Cleaner, retired 70 years old.
- Active mosque volunteer
- Fell one night trying to get out of bed. Broke right leg.
- Can no longer volunteer or go out to meet friends



## Mr Mak, 65, Chinese

- “Karang Guni”, recycling collector
- Imprisoned for selling stolen goods.
- Suffered a stroke while serving end of prison sentence
- Weakness in upper and lower limbs leg
- Requires wheelchair to ambulate
- Unable to work



## Mr Chan, 70, Chinese

- Taxi driver.
- Amputation below right knee due to complications from diabetes in 2014
- Loss job and income
- Use prosthetic limb to ambulate
- Rejected wheelchair

**Mr Mak needs to borrow money from friends just to get by:**

“If I ran out of money all of a sudden and I want to buy something to eat tomorrow, how to eat? I have to borrow it from friends. They will refuse, because they are afraid that I am not able to repay. This is the reality.”

**Feels ostracized and ashamed, attributes money to friendship:**

“People are very materialistic, all about money. People only follow the money, if you have no money, how do you live?”

**Complex, perpetuating cycle of diminished social networks and financial desperation reinforcing each other.**



## Mr Mak

“My meal even got stolen. I was in the wheelchair, I had to ask my neighbours to push me downstairs to get food and buy things. When it rains, I couldn’t eat for the whole day. It was painful. Without this electric wheelchair, it was really inconvenient, someone had to push me out when I needed to buy something, that was the time I suffered.”



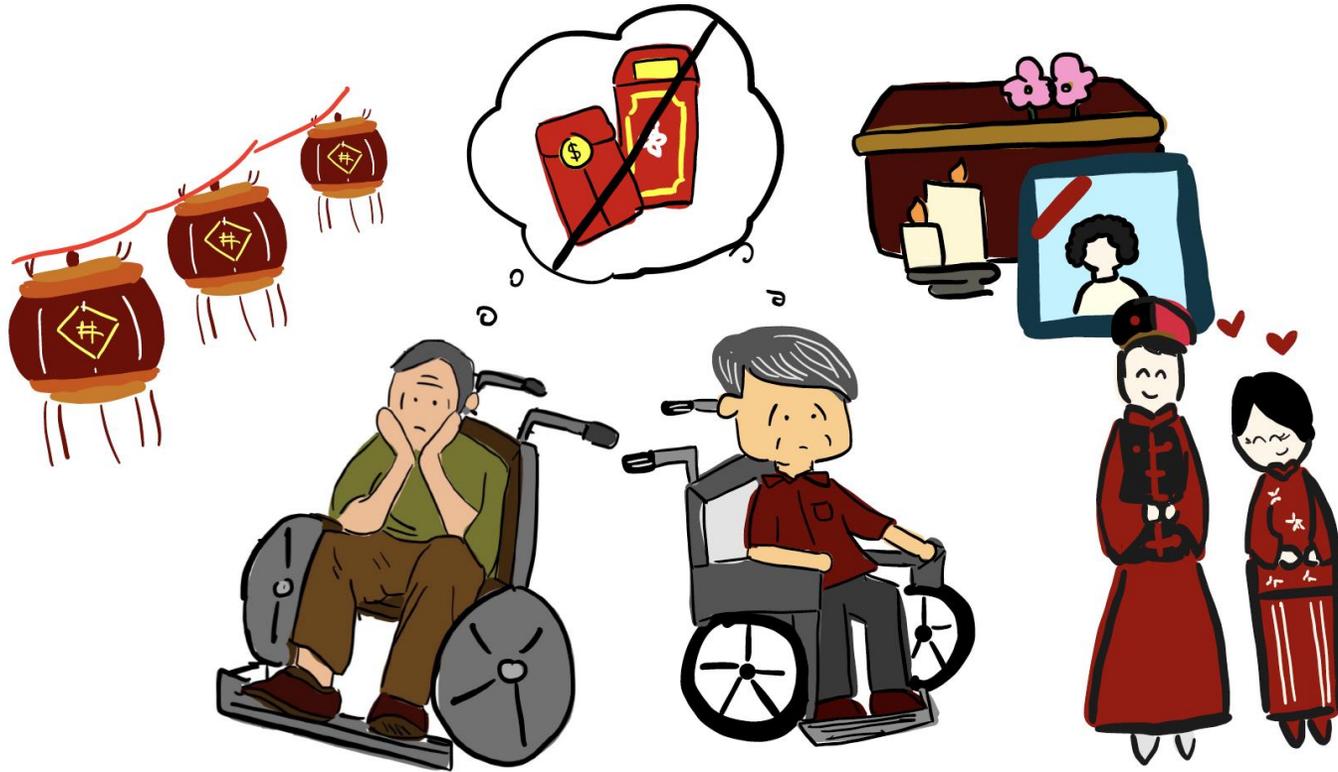
## Mr Tan

“I keep wondering what I will do tomorrow with so little money left. I want to see a doctor for my leg at Jalan Bukit Merah the doctor is so good. With one injection he solved my problem...But I don’t have money for that...Now I can’t sell the drugs and I can’t work. What am I supposed to do? Even if there are drugs now what can I do?”



## Mr Tan excuses himself from participating in CNY

“During Chinese New Year it’s good to reflect, and be with family. With no money for angpow, I can’t go to the gathering. The relatives will look down on me. I need to have *angpow* for my grandkids.”



## Mr Mak avoids being invited to weddings and funerals

“I don’t contact relatives and I don’t participate in the *red and white affairs* [red refers to wedding dinner; white refers to funeral]. I will just avoid them if I can, I don’t let them know. Now when children of my relatives who got married, they no longer send me invitation.”

## Mr Chan, 74

- Rejected motorized wheelchair due to 20% co-payment. “Afraid people will steal wheelchair”
- Use prosthetic limb and walking stick to ambulate, exposed to environmental barriers: Wet surfaces, curbs
- Daily challenges: buying food, going beyond 1 block

**“Even 3 blocks away from here...to go to the Senior Activity Centre is still very far. When I collect rations, I need a taxi”**



## Mr Ong, 74

- Can barely walk or stand for long due to weakness in lower limbs
- Can't operate due to co-morbidities.
- Currently experiences freedom of movement in the neighbourhood with the help of his PMD scooter.

**“Don't have this car, then make friends with the bed... HDB we still can have freedom. Go anywhere. Drive this car go everywhere.”**



## Perception of mobility/ freedom defined by life-space context (Nursing home vs community)

**Mr Ong** who lives in a senior group home, deployed “creative strategies” to avoid being sent to nursing home

- “The best is I don’t fall down”
- **Self-agency:** During assessments, present himself as capable of walking short distances (even though he can barely walk) and able to do some activities of daily living (ADLs) to remain in the community or risk being sent to nursing home
- **Motivation:** Nursing home = complete loss of freedom, HDB community = freedom to go out
- Losses in mobility is also context dependent, nursing home imposes heavy restrictions on older persons’ life-space compared to in the community.



“Once you fall down, they will send you to old folks home. Once you go in, you don’t have freedom anymore. You only make friend with the bed everyday. Cannot go out already. Unless got relatives come and visit you and bring you out. But also cannot.”



**“I hate being in a wheelchair. I hate looking at people’s eyes when I’m being pushed.”**

- Mr Tan, 67



**“When I see people exercising at the Senior Activity Centre, I feel inferior because I can’t do it what others can. The exercises are very hard for me, so I rarely participate.”**

Mr Mak, 65

## Mdm Salmah, 85, Malay

- Used to travel to several mosques to volunteer her services
- Fell one night trying to get out of bed in 2021. Broke her left leg.
- Can no longer easily travel to mosques for activities, or religious classes, reacquaint with friends.
- Subsists on \$810 a month in assistance money.
  - needs to set aside about \$250 each month for taxi fare for polyclinic and hospital appointments.

### However:

- Friendly, neighbourly, familial ties are maintained.
- Does not feel she lacks social support.
- Describe self in positive terms : “Independent-minded”, “friendly”. “jovial and generous”
- Well-being is not affected by loss in mobility



### **Life-space may be limited due to mobility restrictions, but older persons' ability to participate socially and make meaning does not → important to quality of life**

- Not all older adults necessarily restrict their extent of life-space, even with mobility losses. Madam Salmah found ways to adapt to new circumstances and overcome personal and environmental barriers
- Attending to physical and environmental barriers are important but other social factors such as self-esteem, feeling valued, and being generative and employable generate life purpose and meaning for older persons
- Possibility to fulfil one's needs, even in a restricted life-space → equally productive to look at how to enable or enhance support for older persons to maintain their subjective wellbeing 'at home' rather than focusing only on extending life-space of older persons

Thank you

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