

Loneliness in Old Age: What can we do?

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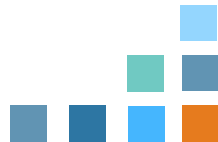
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Presentation outline

- What is 'loneliness'?
- Prevalence and vulnerable group of loneliness
- Consequences of loneliness
- Findings of the study in loneliness (CHARLS data)
- Recommendations: what we can do?



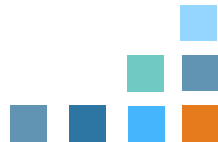
Source: South China Morning Post





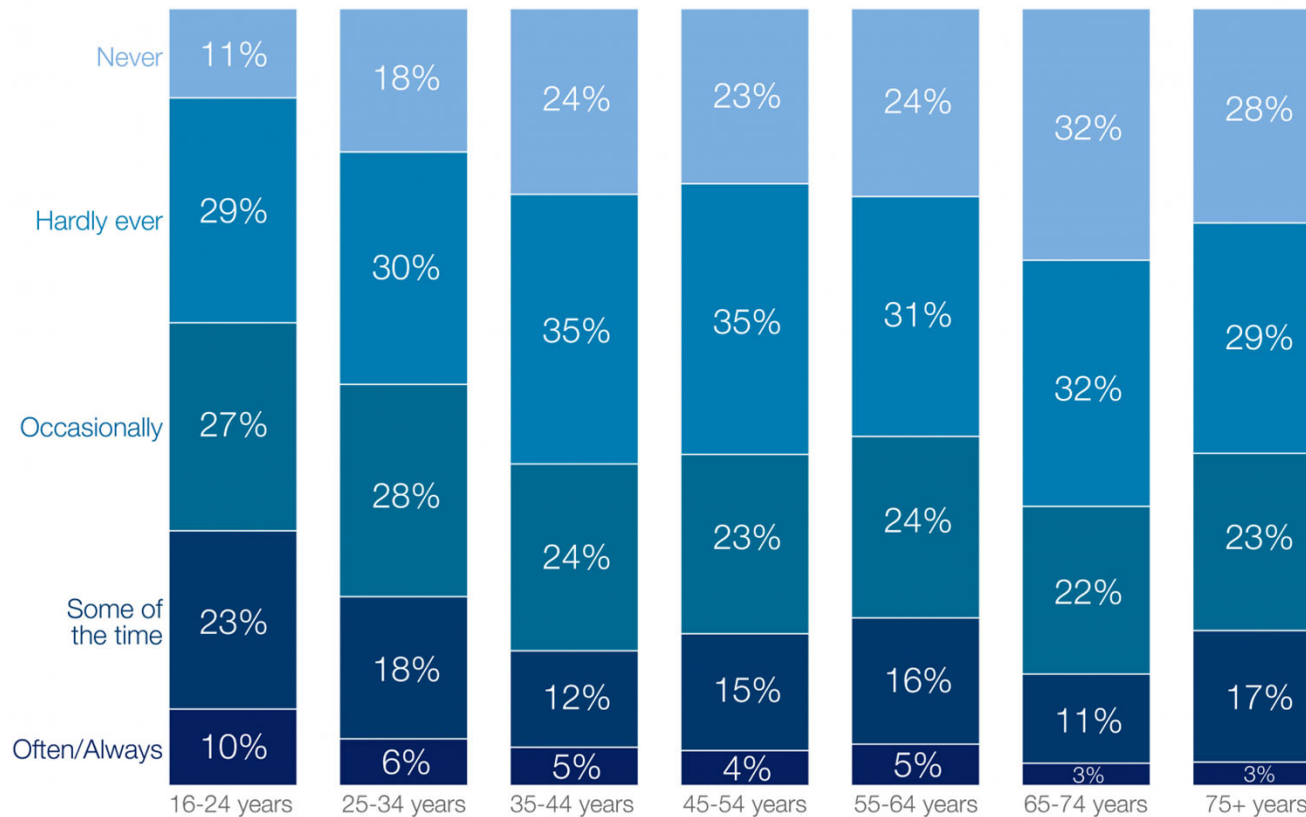
Loneliness

- Loneliness is a growing public health concern in our ageing society.
- One-third of people experience some degree of 'loneliness' in later life (Fakoya et al., 2020).
- One of the most widely used definitions of loneliness (Valtorta and Hanratty, 2012) :
 - **Social loneliness:** inadequate social network
 - **Emotional loneliness:** absence of a specific desired companion (close, intimate relationships)



Reported frequency of loneliness by age in England, 2017

The survey asked people living in England: "How often do you feel lonely?" with the following response categories: "often/always", "sometimes", "occasionally", "hardly ever" and "never".



Data source: UK Office for National Statistics (ONS). Results from the Community Life Survey, 2016 to 2017.
OurWorldinData.org - Research and data to make progress against the world's largest problems.

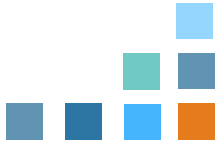
<https://ourworldindata.org/loneliness-epidemic>

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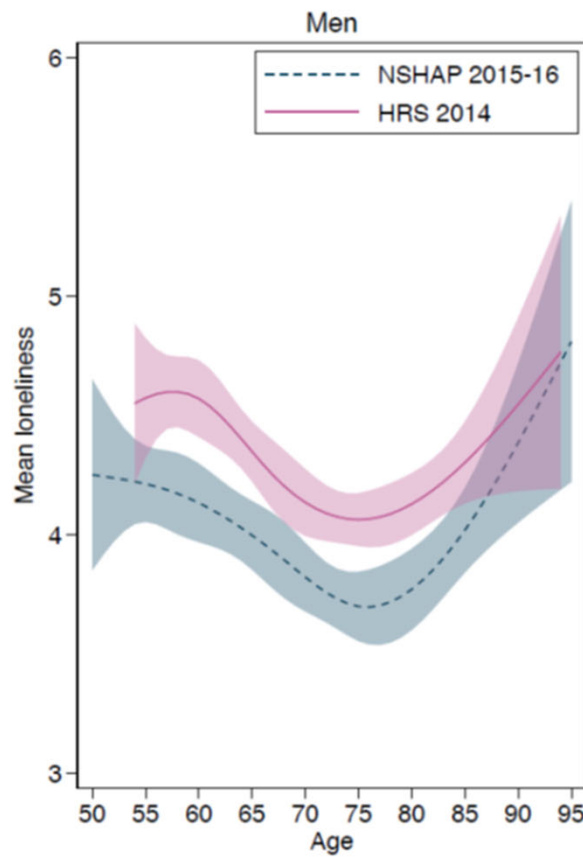


Would we experience loneliness as we age?

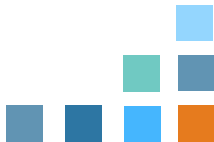
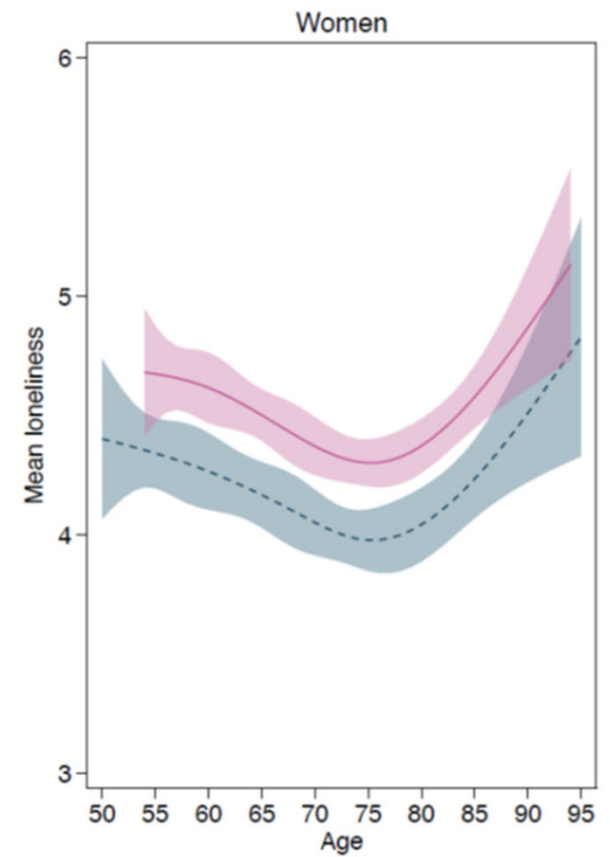


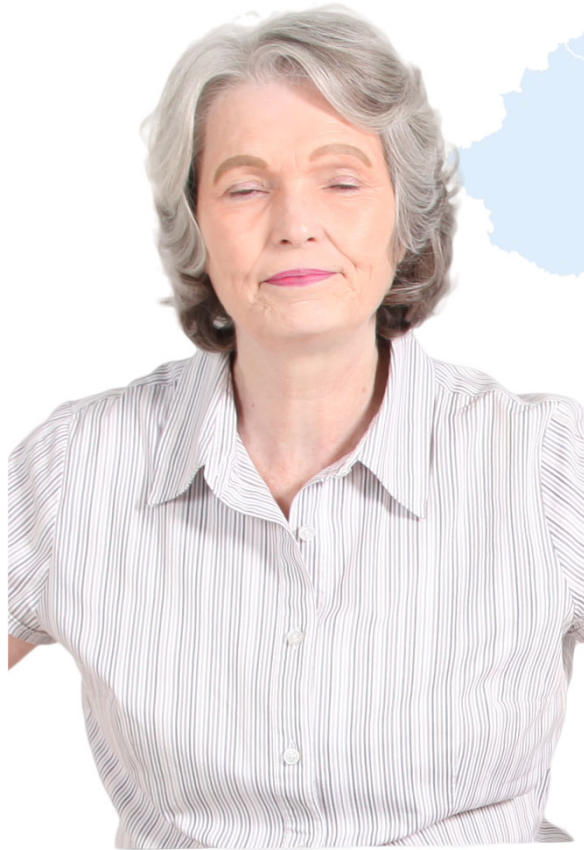
Loneliness decreases with age through 70s but it increases after age 75.

Hawkley et al. (2019)

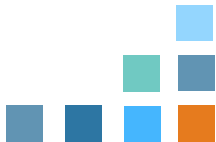
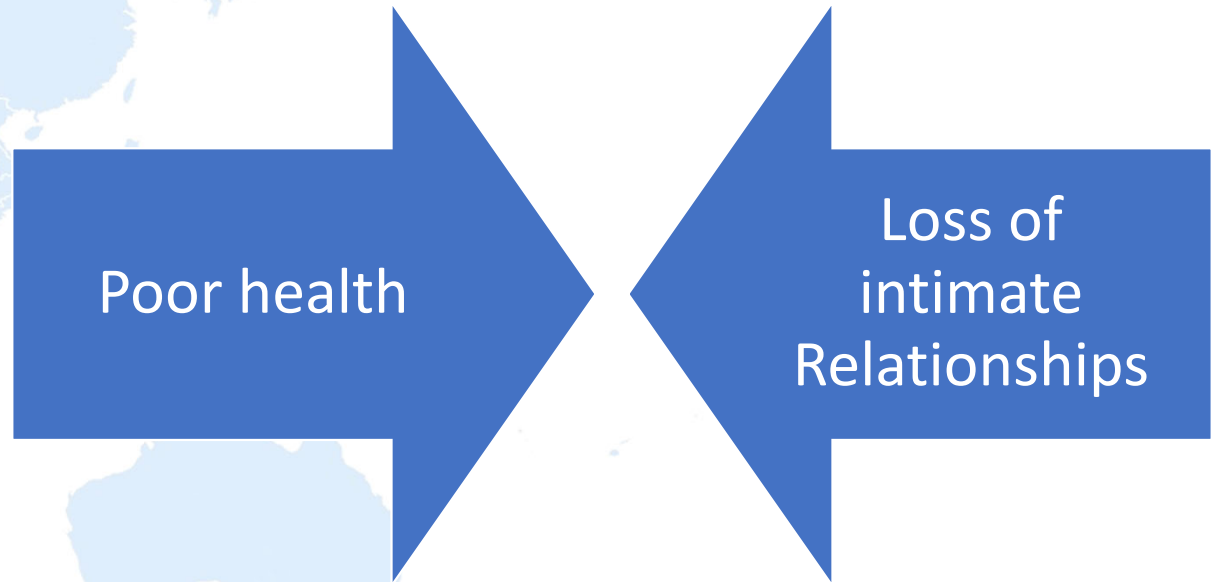


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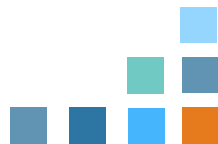
Two big forces that create loneliness in old age...



Prevalence of loneliness among the oldest old

- A Sweden repeated cross-sectional study
- Participants: aged 85, 90, and 95 years old
- 47.1 - 53.2% reported frequent loneliness
- But there was no increase in loneliness over a ten-year interval

(Nyqvist et al. 2017)



Who experience loneliness?

Lonely
n=189

not lonely
n=212

			p
	Sex		
	Men	39.7	60.3
	Women	51.2	47.9
	Age group (years)		
	85	43.0	57.0
	90	45.6	54.4
	>/=95	58.3	41.7
	Living region		0.932
	Rural	53.5	46.5
	Urban	47.1	52.9
	Length of schooling (yrs)	7.3±2.5	7.5±2.8
	Current living situation		<0.001
	At home with someone	10.6	89.4
	At home, alone	64.1	35.9
	Institution, alone	58.6	41.4

Extracted from Table II - data in 2010-2012
(Nyqvist et al. 2017)

- Women
- Living alone at home
- Living in institution



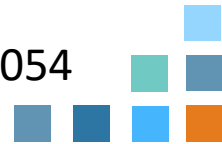
Who experience loneliness?



	Lonely n=189	Not lonely n=212	p
Children			
Yes	48.2	51.8	0.252
No	37.5	62.5	
Perception of visits			
Often, sometimes	44.2	55.8	0.023
Seldom, never	61.5	38.5	
Visited at least once in the last week			
Yes	40.8	59.2	0.080
No	51.3	48.7	
No. of visits during a week			
2+	45.0	55.0	0.381
0-1	50.5	49.5	
Have a good friend to talk to			
Yes	44.0	56.0	0.054
No	57.6	42.4	

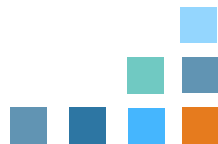
- Perception of visits
- No one visit

Extracted from Table II
- data in 2010-2012
(Nygqvist et al. 2017)



Consequences of loneliness

- Increase mortality by 26% (Holt-Lunstad et al. 2015).
- increased risk of becoming physically frail or pre-frail around 4 years later (Gale et al., 2018).
- significantly and positively associated with physician visits ($\beta = 0.075$, $SE = 0.034$). But loneliness was NOT significantly associated with hospitalizations (Gerst-Emerson et al., 2015).
- loneliness had a negative effect on QoL ($b = - 0.37$, $p < 0.001$) (Kang et al., 2018).





How to buffer loneliness?

Can we reduce loneliness and increase quality of life?

Many interventions have been developed to deal with loneliness

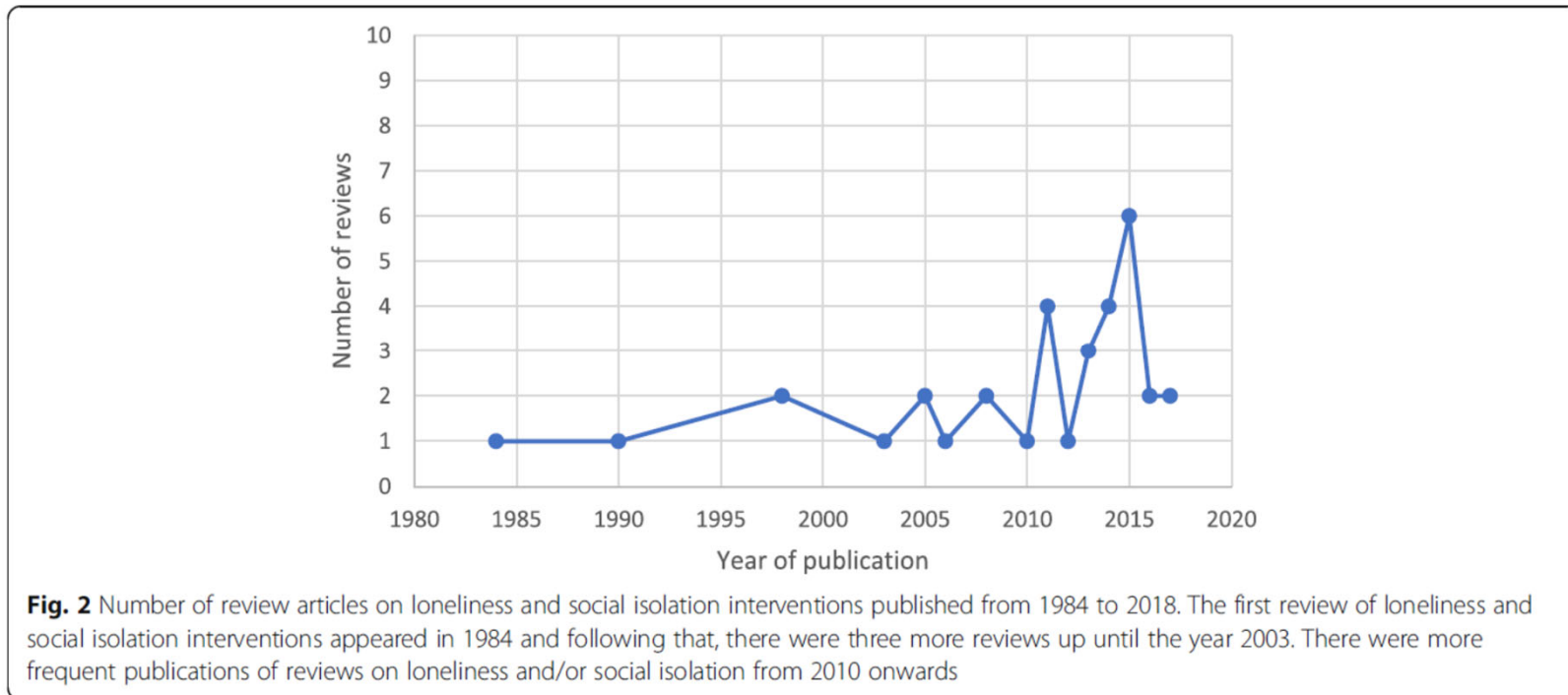


Fig. 2 Number of review articles on loneliness and social isolation interventions published from 1984 to 2018. The first review of loneliness and social isolation interventions appeared in 1984 and following that, there were three more reviews up until the year 2003. There were more frequent publications of reviews on loneliness and/or social isolation from 2010 onwards

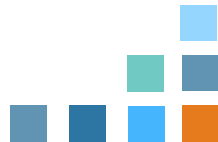
Fakoya et al., 2020



Interventions to reduce loneliness

- Mindfulness-based Stress Reduction program significantly reduced loneliness (Hagan et al., 2014).
- New technologies (web-based interventions and computer games) significantly reduced loneliness (Hagan et al., 2014).
- Companion robot (Paro) significantly reduced older adults' loneliness in residential care homes, compared to resident dog (Robinson, 2013).

One-size-fit-all approach to address loneliness is NOT recommended (Fakoya et al., 2020).



A study on loneliness using CHARLS data

- China Health And Retirement Longitudinal Study (CHARLS)
 - 2015 wave; n = 3965
- **Loneliness:** measure by a single item “In the last week, how often did you feel lonely?” 4-point likert scale: 1=rare or none of the time, 4 = most or all of the time (5-7 days)
- **Social Engagement:** 10 types of social activities (TSA); frequency of attending these social activities (FSA)
- Profile of the subjects
 - Age: mean = 67.84 (SD = 6.37)
 - Male: 50.6%
 - Married: 78.3%
 - Primary school or below: 29.2%
 - Living in village: 73.3%

(Leung et al., in preparation)

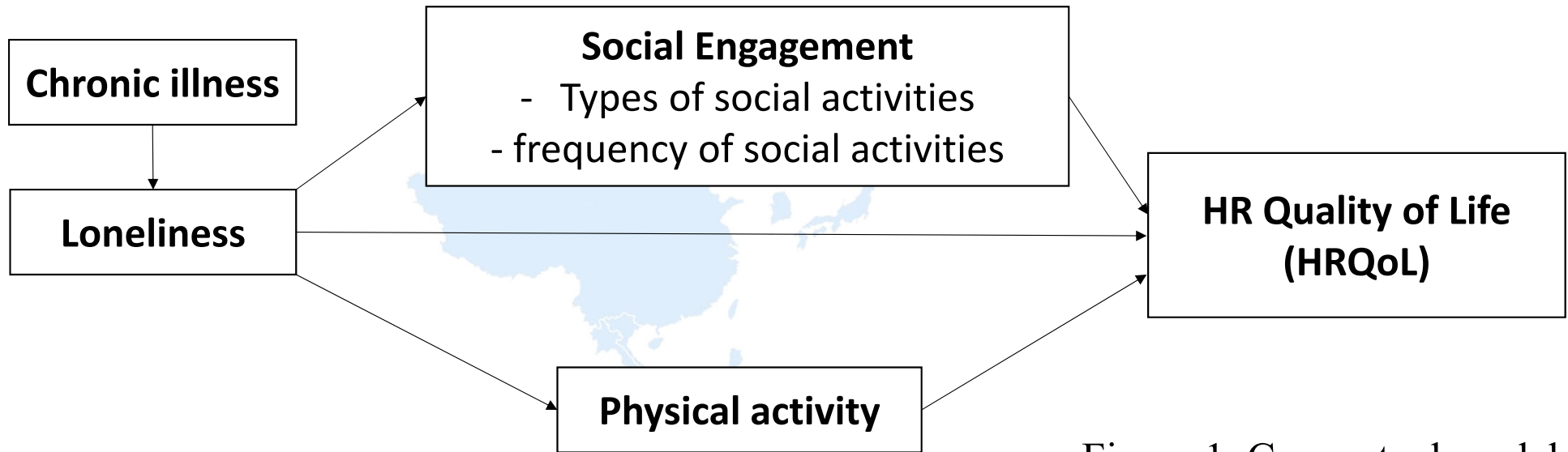


Figure 1. Conceptual model

Hypothesis 1: Social engagement mediates the relationship between loneliness and quality of life

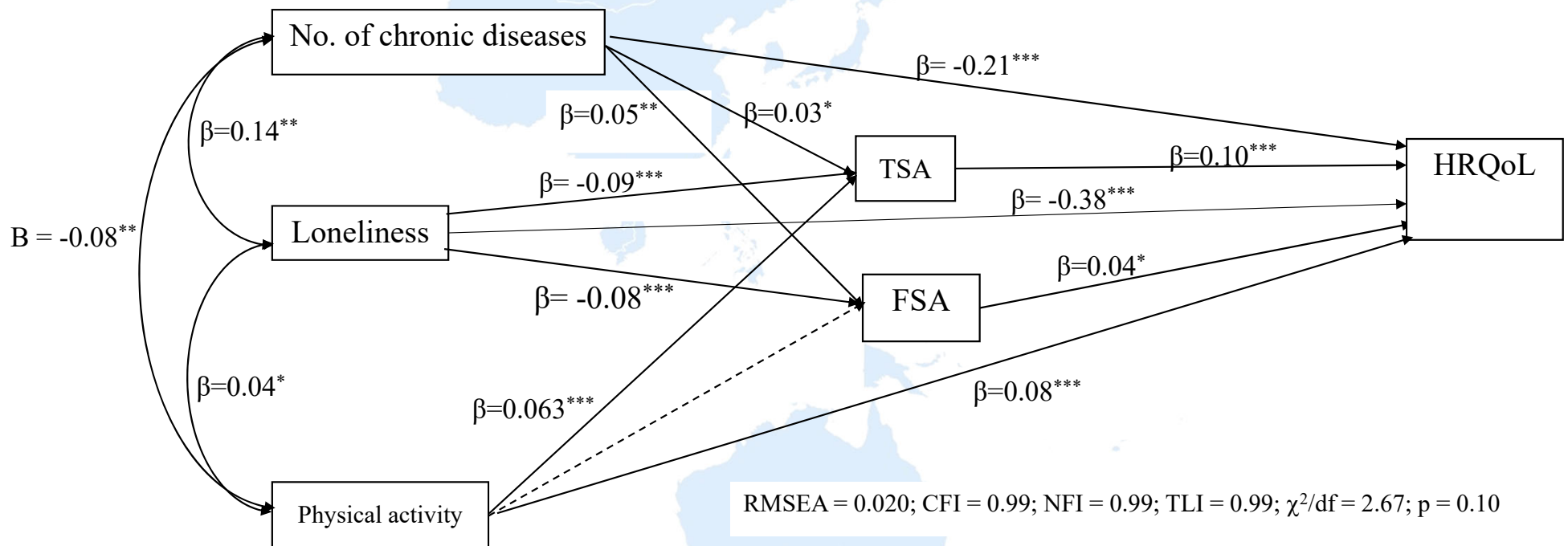
Hypothesis 2: Physical activity mediates the relationship between loneliness and quality of life

Note.

Social engagement includes: 1) Types of social activities (TSA), 2) frequency of attending social activities (FSA).
Health-related quality of life (HRQoL)



Physical activity and engagement in social activities mediate the relationship between loneliness and quality of life

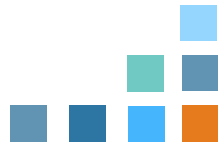


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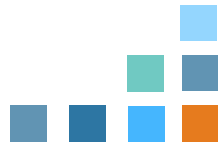
Discussion

- Loneliness are negatively associated with HR quality of life.
- Loneliness are also negatively associated with types and frequency of social activities
- TSA and FSA are mediators:
 - develop interventions that engage older adults to different types of social activities
 - Encourage older adults to engage more social activities
- Physical activity is also a mediator:
 - Encourage older adults to do more physical activities.
 - Social connectiveness can be cultivated through physical activities (Frank et al., 2021)
 - It is feasible to develop physical activity for community-dwelling old adults at risk of loneliness (Shvedko et al., 2020).



Conclusion

- Loneliness is a public health issue.
- Loneliness is prevalent among older adults.
- Loneliness increases mortality, chance of frailty, utilization of health services, and lower quality of life.
- Interventions to combat with loneliness should be individualized.
- Engagement in social activities (serve as volunteers, carers, play mahjong, etc.) and physical activities is a potential effective strategy to deal with loneliness. More research is warrant.

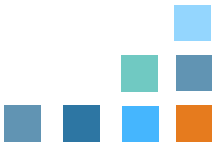




Thank you!

Your comments are welcome.

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