SMU
SINGAPORE MANAGEMENT UNIVERSITY

Centre for
Research on
Successful Ageing



ROSA Research
Brief Series
October 2026

PREVALENCE AND PATTERNS OF SOCIAL ISOLATION AND LONELINESS AMONG OLDER ADULTS IN SINGAPORE

KEY FINDINGS

1. Among the 4,775 SLP respondents who were aged between 60 and 80 years and participated in the survey module on social isolation and loneliness fielded in January 2025, about 1 in 2 (46.80%) were considered at risk of social isolation. On average, they have fewer than two relatives and two friends with whom they engage every month, feel at ease talking about private matters, and feel close enough to ask for help when needed.
    a. On average, respondents reported engaging with more relatives than friends.
    b. Male respondents, younger individuals, those living in smaller housing types, with no formal education or only primary school education, and those who were unemployed were more likely to be at higher risk of social isolation.

2. About 2 in 5 (42.24%) respondents were identified as mostly lonely.
    a. Those who were separated, divorced or widowed, with post-secondary or university education, and those who are unemployed or laid off were more likely to be in a higher loneliness category.

3. The majority of respondents (91.87%) maintained at least some contact with their friends. The most common methods of keeping in touch were through messaging (78.37%), making plans to meet in-person (60.01%), and making calls (47.28%).
    a. Among those who did not contact their friends at all, the most common reasons were that they preferred to spend time or do things alone (51.38%), have lost touch with friends (32.85%), or lack the time due to other commitments (27.96%).
    b. Kendall's Tau-b indicated a significant negative correlation between social isolation risk status and both the frequency of contacting friends ($\tau b = -0.365$, $p < 0.001$) and meeting new people ($\tau b = -0.256$, $p < 0.001$). Slightly under half (48.12%) of respondents who were considered at risk of social isolation rarely or never contact their friends, as compared to only 16.34% among those who are *not* at risk.
    c. Similarly, Kendall's Tau-b indicated a significant negative correlation between loneliness status and both the frequency of contacting friends ($\tau b = -0.195$, $p < .001$), and the frequency of meeting new people ($\tau b = -0.0697$, $p < .001$).

4. About 4 in 5 respondents (82.23%) reported making at least some effort to meet new people. The most common methods of meeting new people were through participating in neighbourhood activities (35.19%), joining exercise programmes or fitness groups (27.28%), and joining faith-based groups or activities (24.83%).
    a. Among those who were not interested in meeting new people, the most common reasons were a preference for spending time alone (49.78%), satisfaction with their current social circle (47.00%), and lack of time (30.89%).

5. About 6.48% of respondents are very or extremely worried about becoming socially isolated or lonely.
    a. Feeling more worried about being socially isolated or being lonely was significantly associated with higher social isolation and loneliness scores. Among those who

were categorised as being at risk of social isolation, over 3 in 5 (62.62%) were at least slightly worried about social isolation, compared to slightly over half (57.45%) among those who are not at risk of social isolation.

b. Among respondents who were categorised as mostly lonely, close to 9 in 10 (85.58%) were at least slightly worried about becoming lonely, in contrast to around 1 in 5 (19.44%) among those who were not lonely.

Implications of findings

1. Design and curate Active Ageing Centres (AACs) and Community Centres (CCs) as inclusive, population-wide shared community spaces that cater to the needs of older adults, to facilitate ease and comfort of older adults meeting up with friends or meeting new people, while taking an asset-based approach that engages seniors as active contributors rather than solely as recipients of support.

2. Public awareness campaigns such as Healthier SG and Age Well SG could seek to normalise help-seeking behaviours and challenge stigma around social isolation and loneliness. Many seniors may downplay their isolation or fear burdening others, leaving their needs unmet. Such campaigns should also be complemented by community touchpoints, including satellite AACs and naturalised settings such as places of worships, where older adults can conveniently access both formal and informal support services.

3. Boost digital literacy in older adults to help them stay connected, given that messaging was the most common method used to keep in touch with friends. Programs should teach safe tech use, and pair online tools with in-person interactions and hybrid programming to encourage active social participation.

INTRODUCTION

As Singapore rapidly transitions into a super-aged society (Lau, 2024), social isolation and loneliness have become growing concerns among academics, policymakers, and social service professionals alike (A. Chan et al., 2023; Fang & Tan, 2023; Shafeeq, 2025). News reports in 2025 highlight an increase in helpline calls from older adults seeking help for their loneliness and emotional distress (Shafeeq, 2025). The prevalence of socially isolated elderly living alone is projected to increase fourfold between 2020 and 2060 (Ng et al., 2020), highlighting the urgency and relevance of addressing this social issue.

Loneliness and social isolation have been consistently found to be related to poorer physical and mental health outcomes which increase the risk of mortality among older adults (Hodgson et al., 2020; Holt-Lunstad et al., 2015; Leigh-Hunt et al., 2017; Puyané et al., 2025). For instance, social isolation has been associated with poorer cognitive function (Evans et al., 2019) and increase in the likelihood of sleep disturbance and fatigue (Choi et al., 2015). Loneliness is a strong predictor of depressive symptoms (Choi et al., 2015; Ge et al., 2017; Zhang et al., 2023) and dementia onset (Holwerda et al., 2014). Beyond health outcomes, the Transitions in Health, Employment, Social Engagement And Intergenerational Transfers in Singapore Study (THE SIGNS Study) found that loneliness was associated with lower usage of hospital emergency room and tertiary care outpatient services in Singapore due to the fear of being a burden to others (Chan et al., 2018).

Increased social engagement has therefore been identified as an important protective factor in mitigating the negative impacts of social isolation and loneliness. Older adults who frequently engage in social activities for leisure and productivity, such as volunteering, visiting friends, and staying employed, tend to report better perceived health, mental health and physical health, and are less lonely (Croezen et al., 2009). In particular, studies suggest that expectations and satisfactions from contact with friends or children, rather than the frequency of such contact, reduce loneliness (Routasalo et al., 2006).

This study thus seeks to understand the prevalence of social isolation and loneliness in older adults in Singapore, demographic characteristics that may be related to the risk of social isolation and loneliness, as well as patterns of social engagement.

In our study, we define the key concepts of social isolation and loneliness as follows:

> ***Social isolation*** *occurs when an individual has a lack of social connection with others. In other words, social isolation refers to having limited or no contact with family and friends (Leigh-Hunt et al., 2017).*
>
> ***Loneliness*** *can be defined as the feeling of sadness, distress, or discomfort in response to a gap in the social connection we want and the amount received (Leigh-Hunt et al., 2017). Loneliness is different from social isolation as it can happen irrespective of the number of social connections one may have.*

The next section outlines the study's methods, including the data and questionnaire measures used.

METHOD

Data

This study uses data collected from the Singapore Life Panel® (SLP), a high-frequency panel of older adults in Singapore aged 49 to 80 in 2025 (see Vaithianathan et al. (2021) for more details on the sampling and recruitment methodology). As of July 2025, the SLP has 10,580 respondents and a response rate of 78%.

In addition to the regular monthly survey, all respondents were invited to participate in a one-off module on social isolation and loneliness in January 2025, conducted in collaboration with the Agency for Integrated Care (AIC). The survey items were developed with reference to focus group discussions conducted in 2023 as part of an earlier collaboration with AIC. Of the 7,821 respondents invited to participate in the January survey, 6,322 respondents completed the regular survey, and 5,042 respondents consented to and completed the additional AIC module. 4,775 respondents who fell within the age-eligible range of 60 to 80 years in 2025 and were retained for the analysis of this report.

All analyses apply survey weights to improve national representativeness of the SLP sample. Population weights were constructed using external benchmarks from the Singapore Department of Statistics (DOS). Specifically, weights were computed as the ratio of DOS population counts to SLP sample counts within each gender, age group and ethnicity cell, capturing under- or over-representation across demographic groups. To enhance stability and usability, we implemented a regularisation procedure and winsorised extreme weights at the 0.5th and 99.5th percentiles to mitigate the influence of very small cell sizes. The final weights balance representativeness with analytical robustness and are applied throughout the study.

Measures

Lubben Social Network Scale-6 (LSNS-6)

The abbreviated Lubben Social Network Scale (LSNS-6) was modified to measures social networks outside of the household (Lubben, 1988; Lubben & Gironda, 2003). It consists of six questions, with three items relating to relatives (such as children, grandchildren, in-laws, siblings, cousins, and so on) and three relating to friends (including neighbours). The items ask: (i) how many relatives/friends you see or hear from at least once a month, (ii) how many relatives/friends you feel at ease with talking about private matters, and (iii) how many relatives/friends you feel close to such that you could call them for help. Respondents indicate their responses on a 6-point scale (0 = none, 1 = one, 2 = two, 3 = three to four, 4 = five to eight, and 5 = nine or more).

A higher summed score represents a larger social network outside the household. Previous studies have used a cut-off score of less than 12 to define individuals ‘at-risk of social isolation’ (Rubinstein et al., 1994; Lubben et al., 2006). This threshold suggests that individuals scoring below 12, on average, report fewer than two individuals across the six social network items assessed by the LSNS-6 (Lubben et al., 2006). In our study, the LSNS-6 demonstrated strong internal consistency, with a Cronbach’s alpha of 0.877.

Three-Item Loneliness Scale (TILS)

To measure loneliness, we adapted the UCLA Three-Item Loneliness Scale (TILS), originally developed for older populations and telephone surveys (Hughes et al., 2004). It consists of three items asking respondents how often they (i) lack companionship, (ii) feel left out, and (iii) feel isolated from others. In our survey, we employed a 5-point scale (0 = never to 4 = always) instead of the 3-point scale used in the original TILS to capture greater variation in responses of respondents' level of loneliness (Chan et al., 2018). Based on the total summed scores from the three items (minimum = 0, maximum = 12), respondents were categorised into “not lonely” (scores of 0), “sometimes lonely” (scores of 1 to 3), or “mostly lonely” (scores of 4 to 12) following the cut-off scores from prior studies in Singapore (Chan et al., 2018). The TILS demonstrated strong internal consistency in our study with a Cronbach alpha of 0.929.

Social engagement with friends and new people

Respondents were asked about the extent to which they actively make efforts to keep in touch with their friends and to make new friends on a 4-point scale (1 = frequently, 2 = occasionally, 3 = rarely, and 4 = not at all). For those who reported making at least some effort (a score of 1 to 3), follow-up questions explored the specific actions they take to keep in touch with friends or make new friends. Respondents who indicated no effort (score of 4) were asked a follow-up question to identify reasons for not keeping in touch or making new friends.

Worry about becoming socially isolated and lonely

Respondents were asked how worried they were about becoming socially isolated and lonely respectively, on a 5-point scale (1 = not at all worried to 5 = extremely worried).

FINDINGS

Demographics of respondents

Table 1 presents the demographic breakdown of the participants. The mean age of respondents was 67.5 years (SD = 5.33) and 52.65% were females. Most respondents were married (76.90%), lived in a 4- to 5-room HDB flat or bigger (60.63%), and resided with others (90.76%). About a third were working full-time (29.97%) and 37.3% were retired, while 4.6% were unemployed or temporarily laid off. For education, about a third had no formal or only primary education (33.54%), about one fifth had a university degree or higher (18.29%), and the remainder had secondary or post-secondary education.

As mentioned in the previous section, all subsequent analyses apply weights to improve national representativeness of the SLP sample by age, gender, and ethnicity.

Table 1. Demographic breakdown of respondents.

Characteristic	Total (*N*=4,775) *n* (%)
Gender	
Male	2,261 (47.35)
Female	2,514 (52.65)
Age group	
60 to 64 years	1,337 (28.00)
65 to 69 years	1,539 (32.23)
70 to 74 years	1,083 (22.68)
75 to 80 years	816 (17.09)
Marital status	
Married	3,672 (76.90)
Single never married	420 (8.80)
Separated/divorced/widowed	683 (14.30)
Housing type	
1- to 3-room HDB flat	919 (19.25)
4- to 5-room HDB flat	2,895 (60.63)
Private housing	931 (19.50)
Education level	
No/primary education	1,601 (33.54)
Secondary education	1,255 (26.29)
Post-secondary education	1,044 (21.87)
University and above	873 (18.29)
Employment status	
Working full-time	1,431 (29.97)
Working part-time/flexibly	625 (13.09)
Unemployed/temporarily laid off	219 (4.56)
Retired	1,782 (37.32)
Homemaker	604 (12.65)
Others	111 (2.32)
Living arrangement	
Living alone	441 (9.24)
Living with others	4,334 (90.76)

**Percentages may not add up to 100% due to missing data.*

Social network and isolation

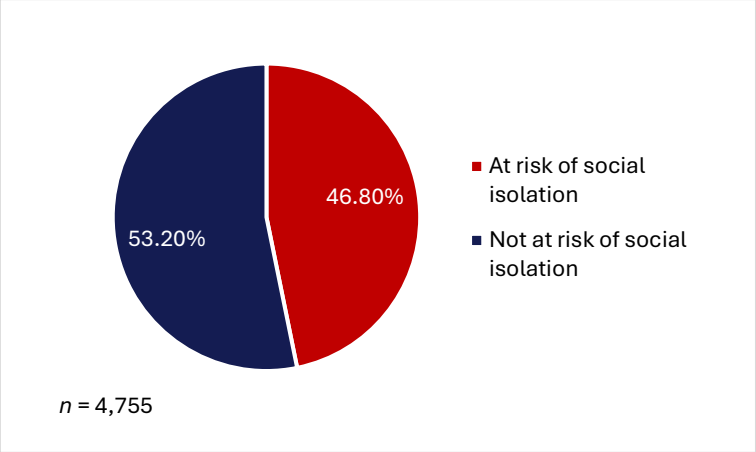
Respondents tended to have more relatives than friends available to perform each of the three social functions, as indicated by a paired t-test ($p < 0.001$). This suggests that on average, respondents tend to engage with, feel more at ease with, and rely on relatives more than friends. The table below presents the mean scores of each item in the LSNS-6 (Table 2).

Table 2. Mean scores of each item in the LSNS-6.

	Mean score (*SD*)
Relatives	
See or hear from once a month	2.40 (1.45)
Feel at ease talking about private matters	1.95 (1.30)
Feel close to and could call for help	1.99 (1.29)
Friends	
See or hear from once a month	2.25 (1.51)
Feel at ease talking about private matters	1.63 (1.29)
Feel close to and could call for help	1.62 (1.29)

Almost 1 in 2 respondents (46.80%) scored less than 12 on the LSNS-6, indicating that they were at risk of social isolation (Figure 1).

Figure 1. Proportion of respondents who are at risk or not at risk of social isolation.



Demographic breakdown by risk of social isolation

We performed chi-square tests to determine which demographic groups were associated with social isolation risk status. Age group, housing type, educational level, and employment were found to be significantly associated with social isolation risk status (Table 3). However, living arrangement was not significantly associated with being at risk of social isolation.

Table 3. Demographic characteristics of respondents by social isolation risk status.

Characteristic	At risk of social isolation (*N*=2,196) %	Not at risk of social isolation (*N*=2,559) %	*p*-value
Gender			0.062
Male	51.64	47.56	
Female	48.36	52.44	
Age group			0.013
60 to 64 years	38.80	33.00	
65 to 69 years	27.34	27.76	
70 to 74 years	20.34	22.49	
75 to 80 years	13.52	16.75	
Marital status			0.431
Married	76.54	77.78	
Single never married	10.08	8.43	
Separated/divorced/widowed	13.38	13.79	
Housing type			< 0.001
1- to 3-room HDB flat	24.15	17.26	
4- to 5-room HDB flat	61.79	61.54	
Private housing	14.06	21.20	
Education level			< 0.001
No/primary education	37.93	30.35	
Secondary education	26.00	26.74	
Post-secondary education	20.68	21.77	
University and above	15.39	21.13	
Employment status			< 0.001
Working full-time	34.29	30.94	
Working part-time/flexibly	10.07	14.54	
Unemployed/temporarily laid off	5.85	3.54	
Retired	32.49	36.58	
Homemaker	14.46	12.47	
Others	2.84	1.92	
Living arrangement			0.962
Living alone	9.07	9.01	
Living with others	90.93	90.99	

The odds ratio of demographic characteristics associated with the risk of social isolation was calculated (Table 4). Males (vs. females), younger age groups, those living in 1-3 room HDB flat (vs. larger HDB flats and private housing), individuals with no formal or only primary school education, and those who were unemployed (vs. working part-time) had higher odds of being at risk of social isolation.

Table 4. Odds ratio of risk of social isolation by demographic characteristics.

	Odds ratio (95% CI)	***p-value***
Gender (ref: female)		
Male	1.33 (1.09-1.63)	< 0.01
Age group (ref: 60 to 64 years)		
65 to 69 years	0.85 (0.67-1.07)	0.170
70 to 74 years	0.76 (0.60-0.98)	<0.05
75 to 80 years	0.65 (0.49-0.87)	<0.01
Marital status (ref: married)		
Single never married	1.19 (0.77-1.84)	0.430
Separated/divorced/widowed	1.05 (0.83-1.34)	0.670
Housing type (ref: 1-3 room flat)		
4-5 room HDB flat	0.70 (0.55-0.89)	<0.01
Private housing	0.54 (0.40-0.73)	<0.001
Education level (ref: No/Primary school)		
Secondary education	0.77 (0.60-0.99)	<0.05
Post-secondary education	0.76 (0.59-1.00)	0.046
University and above	0.62 (0.45-0.86)	<0.01
Employment status (ref: Unemployed/ temporarily laid off)		
Working full-time	0.71 (0.42-1.18)	0.182
Working part-time/flexibly	0.44 (0.26-0.74)	<0.01
Retired	0.65 (0.40-1.07)	0.088
Homemaker	0.84 (0.50-1.42)	0.527
Others	0.91 (0.48-1.71)	0.763
Living arrangement (ref: living with others)		
Living alone	0.82 (0.55-1.22)	0.332

* *Note: Reference categories were selected based on conceptual relevance and interpretability.*

Loneliness

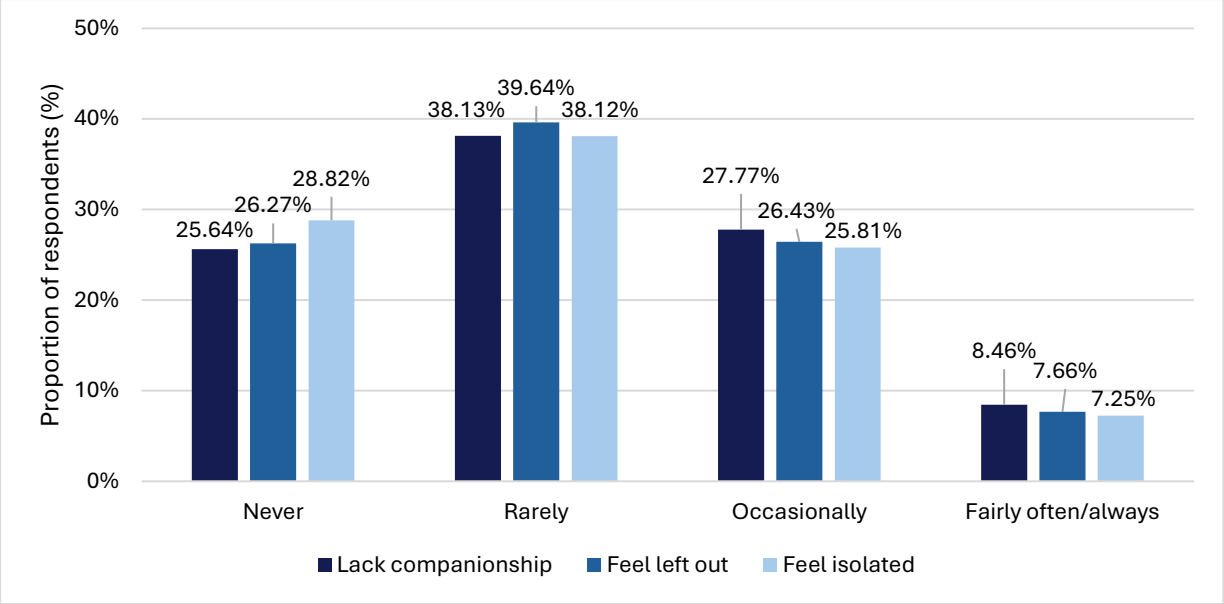
The table below presents the mean scores of each item in the TILS (Table 5).

Table 5. Mean scores of each item in the TILS.

	Mean score (*SD*)
Lack companionship	1.22 (0.98)
Feel left out	1.17 (0.94)
Feel isolated	1.13 (0.95)

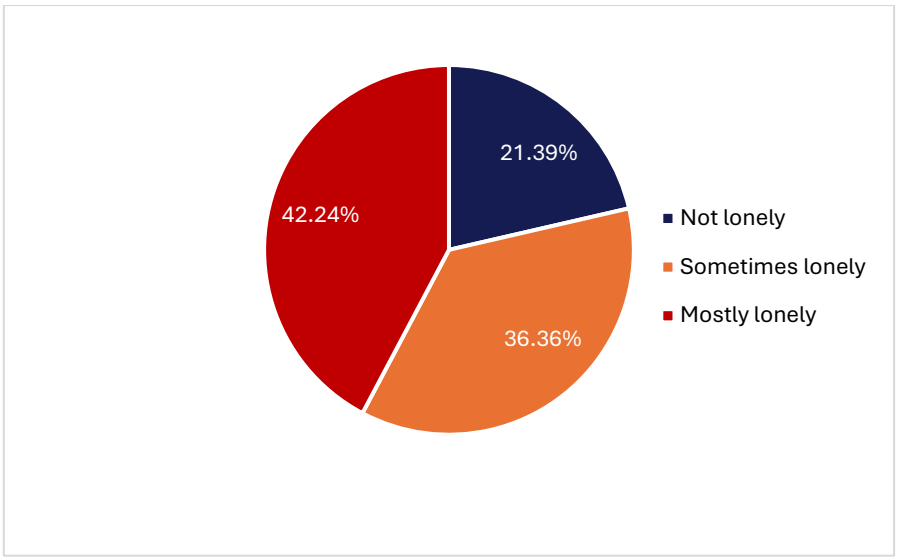
8.46% of respondents reported feeling that they often or always lack companionship, while 7.66% and 7.25% reported feeling left out or isolated respectively (Figure 2). Similarly, a greater proportion of respondents reported feeling that they lack companionship occasionally (27.77%), as compared to feeling left out (26.43%) or feeling isolated (25.81%).

Figure 2. Distribution of responses for the three items in the TILS.



Nearly 4 in 5 respondents (78.60%) experienced some form of loneliness, with about 2 in 5 (42.24%) being classified as mostly lonely (Figure 3).

Figure 3. Distribution of respondents by loneliness status.



Demographic breakdown by loneliness status

Chi-square tests were conducted to determine which demographic groups were associated with loneliness status. Marital status, education, employment, and living arrangement were found to be significantly associated with loneliness status at 5% significance level (Table 6).

Table 6. Demographic characteristics of respondents by loneliness status.

Characteristic	Not lonely (*N*=925) %	Sometimes lonely (*N*=1763) %	Mostly lonely (*N*=2073) %	*p*-value
Gender				0.311
Male	46.20	50.62	50.05	
Female	53.80	49.38	49.95	
Age group				0.399
60 to 64 years	33.09	36.83	36.19	
65 to 69 years	27.33	28.02	27.28	
70 to 74 years	21.92	21.96	20.90	
75 to 80 years	17.66	13.19	15.63	
Marital status				< 0.01
Married	75.50	82.23	73.83	
Single never married	10.33	6.77	10.65	
Separated/divorced/widowed	14.17	11.00	15.51	
Housing type				0.095
1- to 3-room HDB flat	25.34	19.15	19.39	
4- to 5-room HDB flat	59.16	62.38	62.16	
Private housing	15.51	18.47	18.45	
Education level				< 0.05
No/primary education	40.17	32.10	32.23	
Secondary education	26.84	27.08	25.76	
Post-secondary education	18.46	21.76	22.16	
University and above	14.52	19.07	19.85	
Employment status				< 0.001
Working full-time	26.75	35.55	32.99	
Working part-time/flexibly	13.26	13.08	11.53	
Unemployed/temporarily laid off	3.54	2.75	6.77	
Retired	40.79	32.25	33.39	
Homemaker	13.45	13.81	13.08	
Others	2.21	2.55	2.24	
Living arrangement				< 0.05
Living alone	11.61	6.58	9.82	
Living with others	88.39	93.42	90.18	

The association between demographic characteristics and loneliness categories was calculated using ordinal logistic regression (Table 7). Compared with married individuals, those who were separated, divorced, or widowed had significantly higher odds of being in a higher loneliness category. Individuals with post-secondary or university education had higher odds compared with those with no formal or primary education. All employment/activity categories had significantly lower odds of being in a higher loneliness category compared with those who were unemployed or temporarily laid off.

Table 7. Ordinal logistic regression of loneliness categories by demographic characteristics (proportional odds ratios).

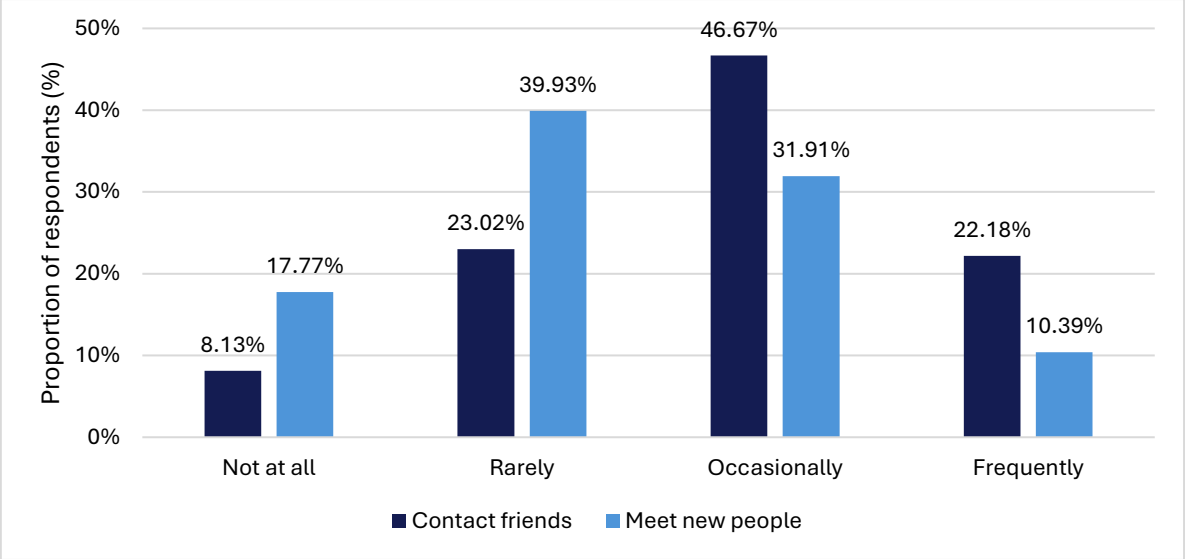
	Proportional OR (95% CI)	***p-value***
Gender (ref: female)		
Male	1.09 (0.90-1.32)	0.358
Age group (ref: 60 to 64 years)		
65 to 69 years	1.01 (0.82-1.23)	0.944
70 to 74 years	1.05 (0.84-1.31)	0.684
75 to 80 years	1.12 (0.85-1.49)	0.426
Marital status (ref: married)		
Single never married	1.44 (0.85-2.44)	0.179
Separated/divorced/widowed	1.45 (1.13-1.86)	<0.01
Housing type (ref: 1-3 room flat)		
4-5 room HDB flat	1.24 (0.99-1.54)	0.057
Private housing	1.24 (0.92-1.66)	0.157
Education level (ref: No/Primary school)		
Secondary education	1.09 (0.87-1.35)	0.460
Post-secondary education	1.25 (1.00-1.55)	<0.05
University and above	1.35 (1.01-1.79)	<0.05
Employment status (ref: Unemployed/ temporarily laid off)		
Working full-time	0.54 (0.36-0.82)	<0.01
Working part-time/flexibly	0.45 (0.29-0.70)	<0.001
Retired	0.42 (0.28-0.65)	<0.001
Homemaker	0.53 (0.33-0.86)	<0.05
Others	0.50 (0.29-0.86)	<0.05
Living arrangement (ref: living with others)		
Living alone	0.82 (0.52-1.29)	0.398

** Note: Reference categories were selected based on conceptual relevance and interpretability.*

Social engagement with friends and new people

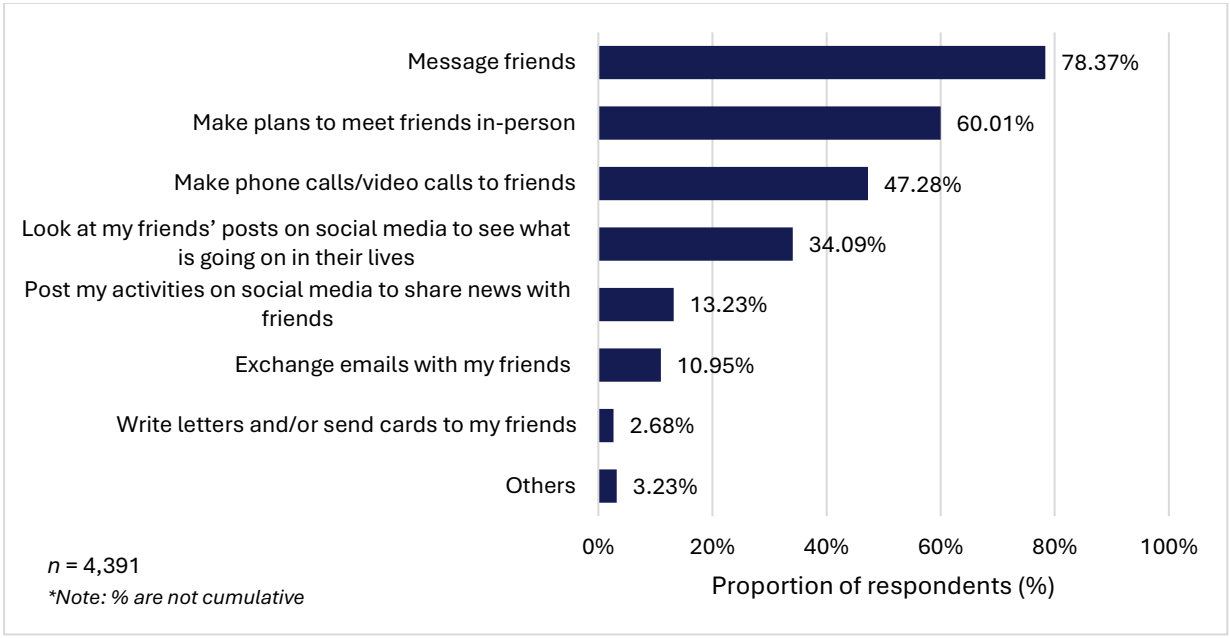
Most respondents (91.9%) reported having at least some form of contact with their friends, while 8.1% indicated they were not in touch with their friends (Figure 4). The proportion was lower for efforts to meet new people: 82.23% of respondents reporting doing so, whereas 17.8% indicated they were not making any efforts to meet new people.

Figure 4. Frequency of respondents' efforts to contact friends and meet new people.



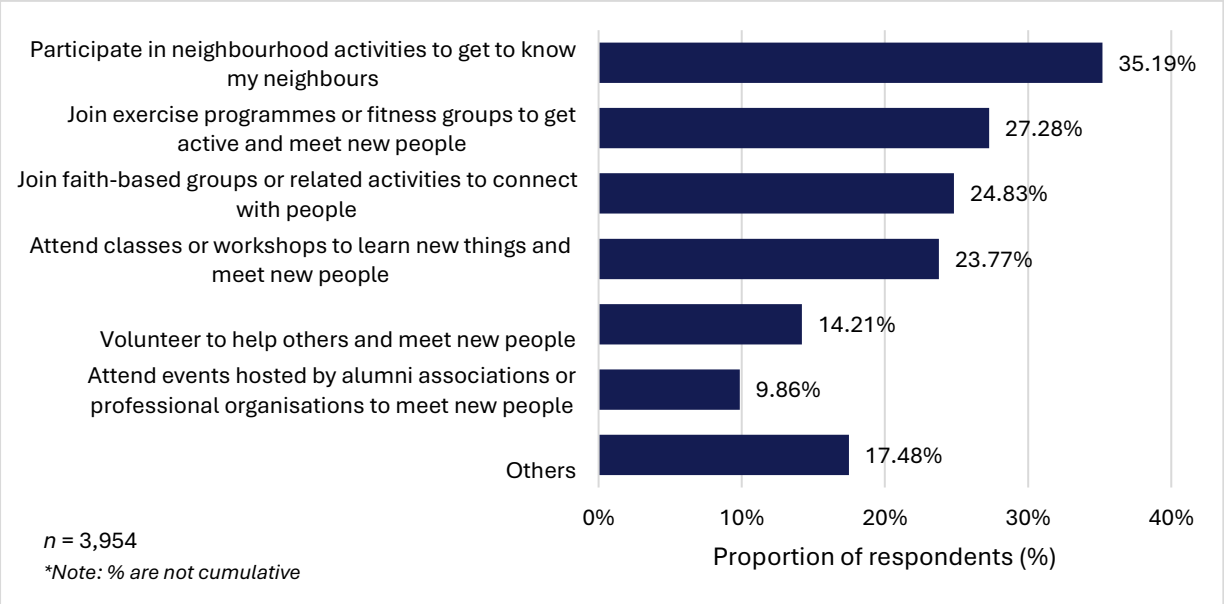
The most common method used to keep in touch with friends was through messaging (78.37%), making plans to meet in-person (60.01%), followed by making calls (47.28%) (Figure 5). Common methods used to meet new people were through participating in neighbourhood activities (35.19%), joining exercise programmes or fitness groups (27.28%), and joining faith-based groups or activities (24.83%) (Figure 6).

Figure 5. How respondents keep in touch with their friends.



**Note: Other methods of keeping in contact with friends that were not included in the questionnaire include exchanges at religious festivals, gatherings or places of worship, and sending festive greetings via messages.*

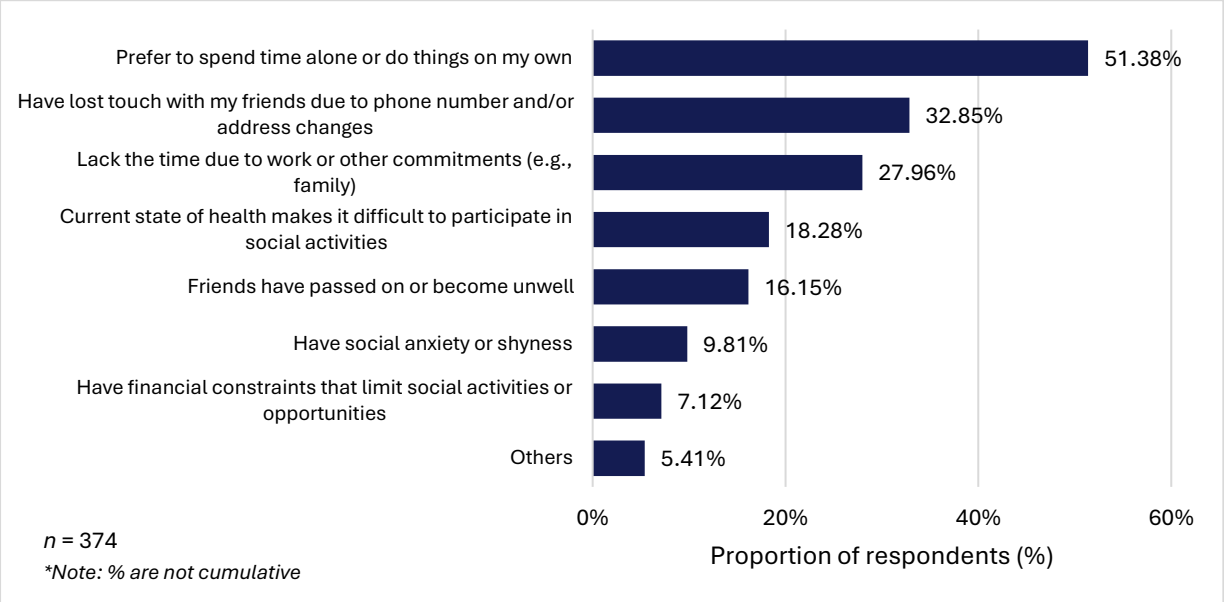
Figure 6. How respondents meet new people.



**Note: Other methods of meeting new people that were not included in the questionnaire include personal activities like golf, travelling, morning walks, work interactions, or through mutual friends.*

For respondents who reported not keeping in touch with their friends, the most common reasons were a preference to spend time alone or do things on their own (51.38%), having lost touch with friends (32.85%), and lacking time due to other commitments (27.96%) (Figure 7).

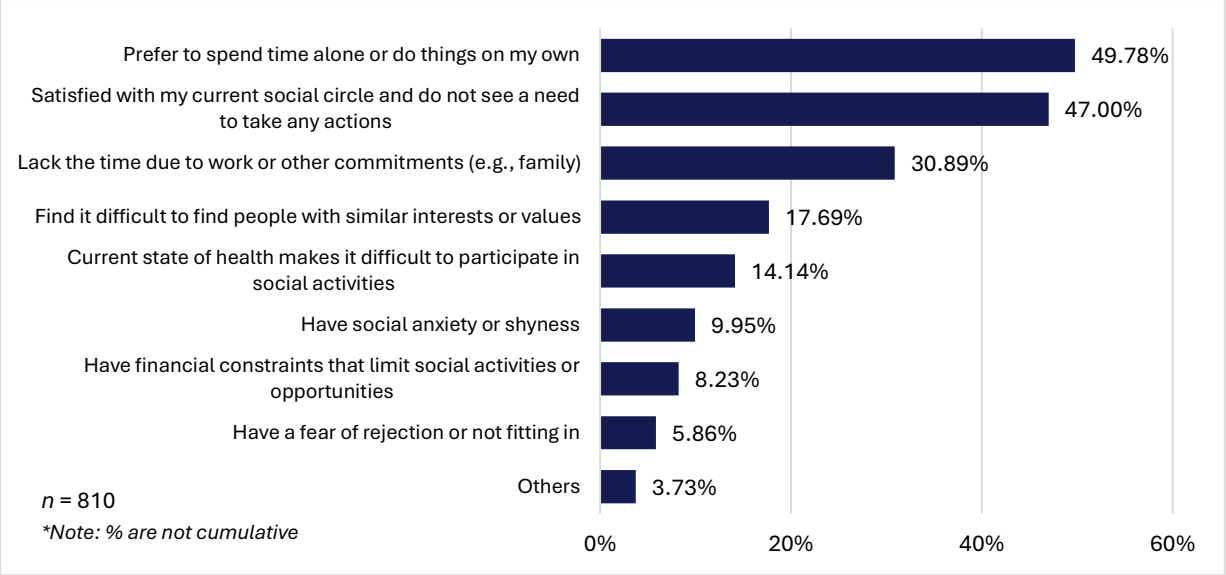
Figure 7. Reasons respondents do not keep in touch with their friends.



**Note: Other reasons for not contacting friends that were not included in the questionnaire include friends are not keen to keep in touch, caregiving responsibilities, or not having close friends.*

Similarly, for respondents who are not interested in meeting new people, the most common reasons were a preference to spend time alone or do things alone (49.78%), satisfaction with their current social circle (47.00%), and lacking time due to other commitments (30.89%) (Figure 8).

Figure 8. Reasons respondents are not interested in meeting new people.



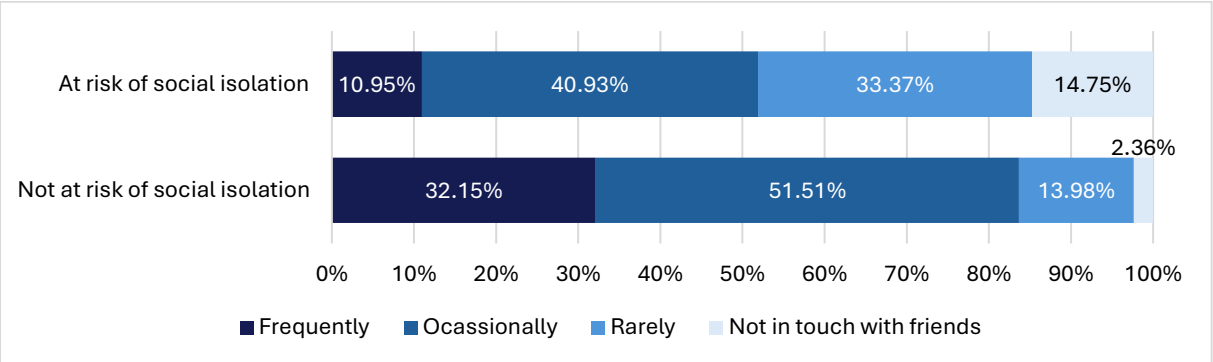
**Note: Other reasons for not wanting to meet new people that were not included in the questionnaire include being wary of meeting strangers, caregiving responsibilities, and not wanting to expend time and effort.*

Social engagement and risk of social isolation

Kendall's Tau-b correlation analysis indicated significant negative correlations between social isolation risk status based on LSNS-6 scores and both the frequency of contacting friends ($\tau b = -0.365$, $p < 0.001$), and the frequency of meeting new people ($\tau b = -0.256$, $p < 0.001$).

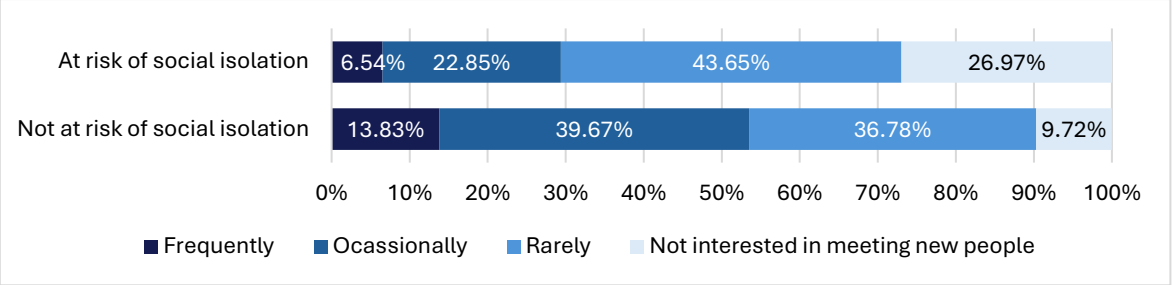
Among respondents identified as at risk of social isolation based on LSNS-6 scores, nearly half (48.12%) of respondents who were considered at risk rarely or never contacted their friends, compared to 16.34% among those who are *not* at risk (Figure 9).

Figure 9. Frequency of contacting friends by social isolation risk status.



Among respondents classified as at risk of social isolation based on LSNS-6 scores, over 1 in 4 respondents (26.97%) reported not being interested in meeting new people, compared to slightly under 1 in 10 respondents (9.72%) among those not at risk. Additionally, more than 65% of those at risk of social isolation only occasionally or rarely look for opportunities to meet new people (Figure 10).

Figure 10. Frequency of meeting new people by social isolation risk status.

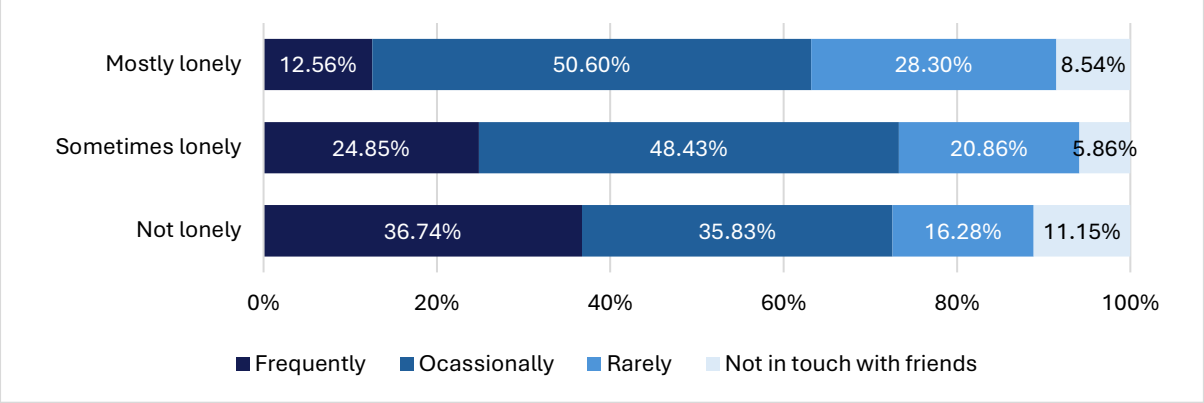


Social engagement and loneliness

Kendall's Tau-b correlation analysis indicated significant and negative correlations between loneliness status based on TILS scores as well as both the frequency of contacting friends (τb = -0.195, $p < .001$), and the frequency of meeting new people (τb = -0.0697, $p < .001$).

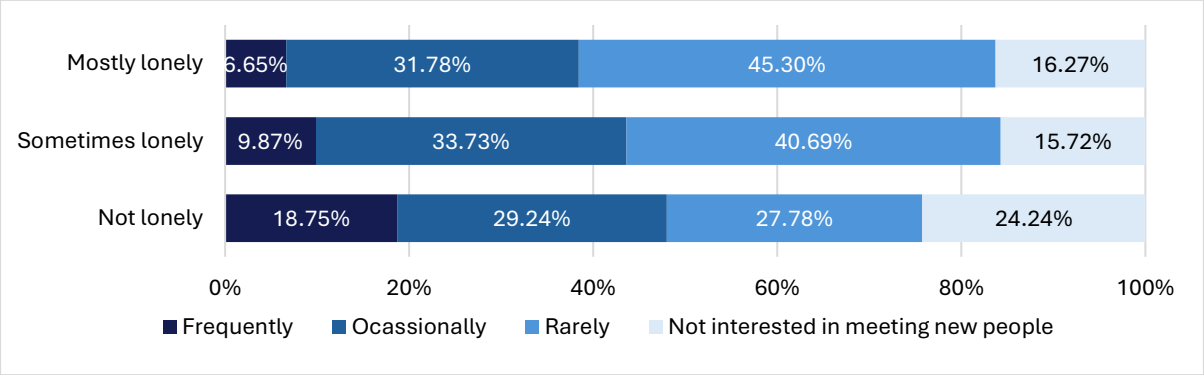
Among respondents classified as mostly lonely based on TILS scores, about one in eight (12.56%) reported contacting their friends frequently, compared to nearly three times the proportion (36.74%) among those classified as not lonely (Figure 11).

Figure 11. Frequency of contacting friends by loneliness status.



While 18.75% of respondents who were not lonely met new people frequently, only 6.65% and 9.87% of those who were mostly or sometimes lonely did so respectively. In addition, a greater proportion of those who were not lonely were *not* interested in meeting new people (24.24%), in contrast to those who were mostly lonely (16.27%) or sometimes lonely (15.72%) (Figure 12).

Figure 12. Frequency of meeting new people by loneliness status.

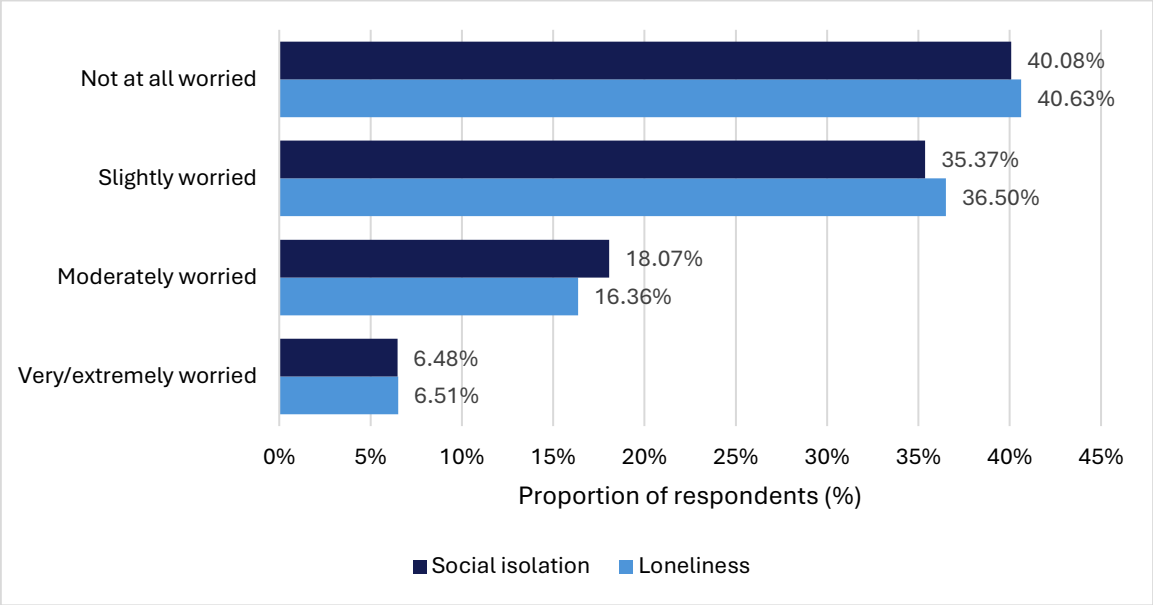


Worry about becoming socially isolated and lonely

In terms of concerns about becoming socially isolated, about 2 in 5 respondents were not worried (40.08%), while 6.48% were very or extremely worried.

Similarly, about 2 in 5 respondents were not worried about becoming lonely (40.63%), while 6.51% were very or extremely worried.

Figure 13. How worried respondents are about becoming socially isolated and lonely.



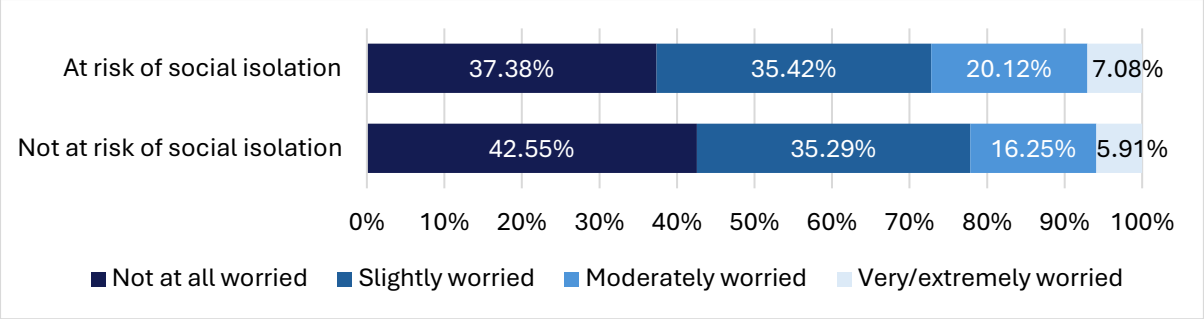
Worry about becoming socially isolated and risk of social isolation

Kendall's Tau-b correlation analysis indicated significant but weak positive correlations between the extent of respondents' worry about becoming socially isolated and risk of social isolation ($\tau b = 0.0759$, $p < 0.001$).

Among those who are reportedly at risk of social isolation, over 3 in 5 (62.62%) were at least slightly worried about becoming socially isolated, compared to slightly over 1 in 2 (57.45%) of those who are not at risk of social isolation (Figure 14). This difference was statistically significant ($p = 0.015$), based on a two-sample t-test for proportions, adjusted for weights.

Despite being considered "not at risk" according to the LSNS-6 score, it is worth noting that more than half of those who were not at risk still have some worries about becoming socially isolated. Additionally, over 1 in 3 respondents were not at all worried about becoming socially isolated despite already being at risk of social isolation according to the LSNS-6 score.

Figure 14. Respondents' worry about social isolation by risk of social isolation.

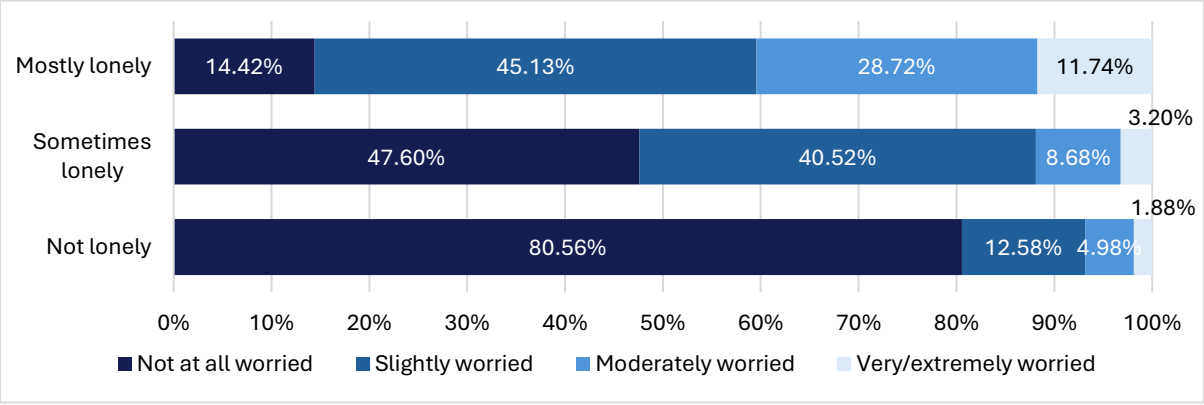


Worry about becoming lonely and loneliness

As both worry about becoming lonely and TILS measure respondents' subjective perception of loneliness, it is expected that they will demonstrate at least a moderate degree of correlation. Kendall's Tau-b correlation analysis indicated significant and moderate positive correlations between extent of respondents' worries about becoming lonely and TILS scores ($\tau b = 0.467$, $p < 0.001$).

Among respondents who were categorised as mostly lonely, close to 9 in 10 (85.58%) were at least slightly worried about becoming lonely, in contrast to around 1 in 5 (19.44%) among those who were not lonely. About 1 in 2 respondents (52.40%) who were sometimes lonely had some worries about becoming lonely (Figure 15).

Figure 15. Respondents' worry about loneliness by loneliness status.



CONCLUSION

Overall, almost half of the SLP respondents were found to be at risk of social isolation while approximately 2 in 5 reported to be mostly lonely. Demographic characteristics such as age group, housing type, educational level and employment were associated with social isolation risk status, and marital status, educational level, employment, and living arrangement were associated with loneliness status. Over 9 in 10 respondents maintained some contact with friends, with a slightly smaller proportion making at least some effort to meet new people. About 3 in 5 respondents expressed some worry about becoming socially isolated or lonely in the future. In addition, we found that respondents felt slightly more connected with their relatives than friends. As family support structures evolve with population ageing, it is worth noting how these changes may impact older adults' access to social support in the future. These findings will be valuable in informing policies about being adaptive to the needs of older adults that enhance their social well-being.

Social connectivity and engagements

We found that digital messaging is the predominant means of maintaining contact, while neighbourhood activities are preferred for forming new connections. This underscores the critical role of built environments, like parks and age-friendly neighbourhoods in fostering social networks (E et al., 2024; Wood et al., 2022). However, older adults also tend to value independence, highlighting the importance of preserving their ability to make choices about the extent and type of social engagement they wish to pursue (Taylor et al., 2024). Although many expressed satisfactions with their current social circles, this may limit efforts to broaden networks. Evidence suggests that expanding social connections beyond close friends and family can have positive effects on health and well-being (Fiori et al., 2006; Piedra & Iveniuk, 2025). Additionally, we found that some respondents assessed to be at risk of social isolation expressed that they were not interested to seek out new friends, or do not worry about being socially isolated. This again stresses the importance of fostering meaningful connectivity even if its immediate benefits may not be recognised.

Social isolation, loneliness and demographics

We found several demographic characteristics that may be related to loneliness and social isolation. These demographic characteristics that could be related to outcomes were lower educational attainment, being single, and unemployment. Individuals with lower education may have fewer opportunities to develop broad social networks or access resources that facilitate social engagement. Being single may limit immediate access to emotional and practical support typically provided by partners or family. Unemployment can reduce daily social interactions, diminish financial means for participating in social activities, and negatively affect self-esteem, all of which can contribute to both perceived loneliness and actual social isolation.

Implications of findings

Findings from our study of social isolation and loneliness should be interpreted in the context of developments in the active ageing and community care landscape as of January 2025. Examples include the rollout of more Active Ageing Centres (AACs) to bring activities closer to seniors, and

efforts to refresh their premises to improve attractiveness. Against this backdrop, we highlight three potential areas for consideration which may inform ongoing efforts to strengthen social connectedness and address loneliness among older adults.

First, existing community spaces such as AACs and Community Clubs (CCs) can be further developed to cater to the diverse needs and circumstances of older adults at risk of social isolation and loneliness. The built environment such as community hubs can facilitate non-kin social interactions through well-maintained spaces that nudge interactions around neighbourhoods (E et al., 2024; Gao et al., 2024; Nakada et al., 2024; Wood et al., 2022). Currently, AACs take an inclusive approach based on the social needs of individuals regardless of socio-economic status. Purely relying on demographic profiling can overlook at-risk individuals, while heightening stigma that discourages participation (Chan et al., 2026; Liougas et al., 2025). In line with this, AACs have been transforming into population-wide health-social hubs (Kwan et al., 2025), with outreach efforts to identify seniors who are observed to be at risk of social isolation across different sociodemographic stratums (Chan et al., 2026). Programming could also take an asset-based approach that engages seniors as active contributors (Mathie & Cunningham, 2003). For instance, recruiting seniors to co-design and lead activities can empower their current engagement skills (Lim et al., 2019). Nonetheless, risk factors such as those with fewer social resources inform where additional efforts may be warranted. For instance, community stakeholders can work with agencies such as the Ministry of Social and Family Development (MSF) to reach out to older adults who are receiving financial support, as they may face additional social vulnerabilities.

Secondly, public awareness campaigns should seek to destigmatise help-seeking behaviours while increasing the accessibility of community touchpoints. Older adults may not always recognise the importance of addressing loneliness and perceive this as a normal part of ageing (Morgan et al., 2022), or refrain from seeking help so as to not burden family and friends (Fox, 2021; Neves et al., 2024). As a result, their needs may remain unmet despite being at risk. Traditional centres may struggle to reach socially isolated older adults. Existing mobile services delivered through vans or buses can bring support directly to areas with limited access to AACs (Ministry of Health, 2025). To further support outreach campaigns, this can be complemented by wider community efforts. For example, recent pilot schemes have tapped on places of worship as third spaces as additional forms of support for formal and informal services (Chin, 2026). Currently, there are plans for more AACs to open satellite centres to bring programmes even closer to seniors' homes in the newly designed Age Well Neighbourhoods (Teo, 2026). Other initiatives like Healthier SG and Age Well SG can also launch concurrent campaigns to challenge barriers and affirm help seeking behaviours. While these efforts can bring support networks into familiar, neutral settings with increased accessibility, they must be tailored to older adults' diverse needs and convey a consistent message that normalises help-seeking behaviours.

Improving digital literacy among older adults remains crucial, given that digital means was a dominant mode of communication. Regular volunteers can support older adults in learning digital communication or social media skills through intergenerational or peer learning models. Crucially, technology should be used as a tool for older adults to contribute meaningfully to their communities, beyond its daily use. For example, DEER Studio's dialect programme empowers seniors to become mentors for youths through the mobile app (Grow Education, 2025),

suggesting that digital technologies help older adults create opportunities for meaningful social participation. However, not all older adults are comfortable using digital technology, so digital literacy programmes should be paired with in-person engagement to ensure accessibility (Sng, 2024). Some AACs are already using technology to deliver services, such as exercise videos to socially isolated older adults at home, allowing those with mobility issues to participate in different activities. While this can be an entry point for older adults into various groups or communities, these needs have adequate safeguards against cyber threats.

Limitations

We acknowledge that this study is not without limitations. First, the cut-off criteria for identifying individuals at risk of social isolation and loneliness may not be definitive in the local context. Although the selected thresholds are widely established in international literature and adopted by other local studies, they have not been formally validated within Singapore's population. The cut offs should therefore be interpreted as indicative rather than absolute. Second, we did not consider the additional effects of chronic diseases and disabilities on social isolation and loneliness, as these disabilities may reduce opportunities for external engagement. Third, we acknowledge that the ageing care landscape may have changed since the study was conducted. We caution the interpretation of findings considering subsequent developments. Future studies should consider incorporating factors like disability or chronic diseases to better capture the interplay between health status and social connectedness for additional policy relevance and accuracy.

REFERENCES

Chan, A., Malhotra, R., Manap, N. B., Ting, Y. Y., Visaria, A., Cheng, G. H.-L., Goh, V. S. M., Tay, P. K. C., Lee, J. M. L., & Maulod, A. (2018a). *Transitions in Health, Employment, Social Engagement and Intergenerational Transfers in Singapore Study (THE SIGNS Study) – I*. Centre for Ageing Research and Education, Duke-NUS Medical School. https://www.duke-nus.edu.sg/docs/librariesprovider3/research-policy-brief-docs/the-signs-study---i-report.pdf

Chan, A., Malhotra, R., Manap, N. B., Ting, Y. Y., Visaria, A., Cheng, G. H.-L., Goh, V. S. M., Tay, P. K. C., Lee, J. M. L., & Maulod, A. (2018b). *Transitions in Health, Employment, Social Engagement and Intergenerational Transfers in Singapore Study (The SIGNS study) – I*.

Chan, A., Malhotra, R., Manap, N. B., Ting, Y. Y., Visaria, A., Cheng, G. H.-L., Goh, V. S. M., Tay, P. K. C., Lee, J. M. L., & Maulod, A. (2018c). *Transitions in Health, Employment, Social Engagement and Intergenerational Transfers in Singapore Study (The SIGNS study) – I*.

Chan, A., Malhotra, R., & Maulod, A. (2023, July 11). Commentary: Loneliness is an overlooked public health challenge in ageing Singapore. *CNA*. https://www.channelnewsasia.com/commentary/senior-loneliness-mortality-risk-ageing-public-health-crisis-3615171

Chan, Y. Z., Yoon, S., Kwan, A. S. T., & Low, L. L. (2026). Aging in place: Implementation facilitators, barriers, and strategies in population health-oriented active aging centers in Singapore. *Frontiers in Public Health*, *14*. https://doi.org/10.3389/fpubh.2026.1748178

Chin, S. F. (2026, August 31). Pilot scheme turns places of worship into 'third spaces' for seniors. *The Straits Times*. https://www.straitstimes.com/singapore/community/from-prayer-to-care-pilot-scheme-turns-places-of-worship-into-third-spaces-for-seniors

Choi, H., Irwin, M. R., & Cho, H. J. (2015). Impact of social isolation on behavioral health in elderly: Systematic review. *World Journal of Psychiatry*, *5*(4), 432. https://doi.org/10.5498/wjp.v5.i4.432

Croezen, S., Haveman-Nies, A., Alvarado, V. J., Van't Veer, P., & De Groot, C. P. G. M. (2009). Characterization of different groups of elderly according to social engagement activity patterns. *The Journal of Nutrition, Health and Aging*, *13*(9), 776–781. https://doi.org/10.1007/s12603-009-0213-8

E, J., Xia, B., Chen, Q., Buys, L., Susilawati, C., & Drogemuller, R. (2024). Impact of the Built Environment on Ageing in Place: A Systematic Overview of Reviews. *Buildings*, *14*(8), 2355. https://doi.org/10.3390/buildings14082355

Evans, I. E. M., Martyr, A., Collins, R., Brayne, C., & Clare, L. (2019). Social Isolation and Cognitive Function in Later Life: A Systematic Review and Meta-Analysis. *Journal of Alzheimer's Disease*, *70*(s1), S119–S144. https://doi.org/10.3233/jad-180501

Fang, C. S., & Tan, J. (2023, December 2). The problem with being alone: Social isolation, loneliness biggest enemy for seniors in S'pore. *The Straits Times*. https://www.straitstimes.com/singapore/all-the-lonely-people-tackling-social-isolation-among-older-singaporeans

Fiori, K. L., Antonucci, T. C., & Cortina, K. S. (2006). Social Network Typologies and Mental Health Among Older Adults. *The Journals of Gerontology: Series B*, *61*(1), P25–P32. https://doi.org/10.1093/geronb/61.1.P25

Fox, B. M. (2021). Looking Behind the Fear of Becoming a Burden. *HEC Forum*, *33*(4), 401–414. https://doi.org/10.1007/s10730-020-09420-w

Gao, S., Ho, E. L.-E., Chua, V., & Feng, C.-C. (2024). More Than Aging in Place: "Aging in Networks" in Singapore. *Annals of the American Association of Geographers*, *114*(9), 2132–2152. https://doi.org/10.1080/24694452.2024.2370922

Ge, L., Yap, C. W., Ong, R., & Heng, B. H. (2017). Social isolation, loneliness and their relationships with depressive symptoms: A population-based study. *PLOS ONE*, *12*(8), e0182145. https://doi.org/10.1371/journal.pone.0182145

Grow Education. (2025, May 7). Deer Studio is a community-built app that empowers dialect-speaking seniors to become language mentors for younger learners. *Facebook*. https://www.facebook.com/GrowEducationPlatform/posts/deer-studio-is-a-community-built-app-that-empowers-dialect-speaking-seniors-to-b/689223713856249/

Hodgson, S., Watts, I., Fraser, S., Roderick, P., & Dambha-Miller, H. (2020). Loneliness, social isolation, cardiovascular disease and mortality: A synthesis of the literature and conceptual framework. *Journal of the Royal Society of Medicine*, *113*(5), 185–192. https://doi.org/10.1177/0141076820918236

Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science*, *10*(2), 227–237. https://doi.org/10.1177/1745691614568352

Holwerda, T. J., Deeg, D. J. H., Beekman, A. T. F., Van Tilburg, T. G., Stek, M. L., Jonker, C., & Schoevers, R. A. (2014). Feelings of loneliness, but not social isolation, predict dementia onset: Results from the Amsterdam Study of the Elderly (AMSTEL). *Journal of Neurology, Neurosurgery & Psychiatry*, *85*(2), 135–142. https://doi.org/10.1136/jnnp-2012-302755

Hughes, M. E., Waite, L. J., Hawkley, L. C., & Cacioppo, J. T. (2004). *A Short Scale for Measuring Loneliness in Large Surveys*. https://doi.org/https://doi-org.libproxy.smu.edu.sg/10.1177/0164027504268574

Kwan, A. S. T., Teo, K. W., Sayampanathan, A. A., Foo, C. D., Lim, K. S., Lee, C. E., & Low, L. L. (2025). Community care at scale: Singapore's Active Ageing Centres 2.0 as a model for healthy ageing. *Annals Academy of Medicine Singapore*, *54*(12), 779–785. https://doi.org/10.47102/annals-acadmedsg.2025239

Lau, D. (2024, October 5). How Singapore is preparing for a super aged society come 2026. *Channel NewsAsia (CNA)*. https://www.channelnewsasia.com/today/big-read/super-aged-2026-singapore-ready-4656756

Leigh-Hunt, N., Bagguley, D., Bash, K., Turner, V., Turnbull, S., Valtorta, N., & Caan, W. (2017). An overview of systematic reviews on the public health consequences of social isolation and loneliness. *Public Health*, *152*, 157–171. https://doi.org/10.1016/j.puhe.2017.07.035

Lim, C., Lim, I., & Chern, S. (2019). Building enabled communities in Singapore. *International Journal of Integrated Care*, *19*(4). https://doi.org/10.5334/ijic.s3201

Liougas, M. P., Fortino, A., Brozowski, K., & McMurray, J. (2025). Social inclusion programming for older adults living in age-friendly cities: A scoping review. *BMJ Open*, *15*(1), e088439. https://doi.org/10.1136/bmjopen-2024-088439

Lubben, J. (1988). Assessing social networks among elderly populations. *Family and Community Health*, *11*(3), 42–52.

Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., von Renteln Kruse, W., Beck, J. C., & Stuck, A. E. (2006). Performance of an Abbreviated Version of the Lubben Social Network Scale Among Three European Community-Dwelling Older Adult Populations. *The Gerontologist*, *46*(4), 503–513. https://doi.org/10.1093/geront/46.4.503

Lubben, J., & Gironda, M. (2003). Centrality of social ties to the health and well-being of older adults. In B. Berkman & L. Harootyan (Eds.), *Social Work and Health Care in an Aging Society: Education, Policy, Practice, and Research* (pp. 319–345). Springer.

Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based Community Development as a strategy for community-driven development. *Development in Practice*, *13*(5), 474–486. https://doi.org/10.1080/0961452032000125857

Ministry of Health. (2025, November 12). *Speech by Mr Tan Kiat How, Senior Minister of State, MDDI & MOH, at the launch of AAC-on-Wheels*. Ministry of Health.

https://www.moh.gov.sg/newsroom/speech-by-mr-tan-kiat-how--senior-minister-of-state--mddi---moh--at-the-launch-of-aac-on-wheels-/

Morgan, D., Burholt, V., & Team, C. W. R. (2022). Transitions in loneliness in later life: The role of social comparisons and coping strategies. *Ageing & Society*, *42*(7), 1607–1628. https://doi.org/10.1017/S0144686X20001634

Nakada, T., Kozawa, T., Seino, S., Murota, S., Eto, M., Shimasawa, J., Shimizu, Y., Tsurugano, S., Katsukawa, F., Sakamoto, K., Washizaki, H., Ishigaki, Y., Sakamoto, M., Takadama, K., Yanai, K., Matsuo, O., Kameue, C., Suzuki, H., Kurotani, K., & Ohkawara, K. (2024). A Community-Based Intervention to Enhance Subjective Well-Being in Older Adults: Study Design and Baseline Participant Profiles. *Healthcare*, *12*(3), Article 3. https://doi.org/10.3390/healthcare12030322

Neves, B. B., Sanders, A., Warren, N., & Ko, P.-C. (2024). Loneliness in Later Life as Existential Inequality. *Sociology*, *58*(3), 659–681. https://doi.org/10.1177/00380385231208649

Ng, R., Lim, S. Q., Saw, S. Y., & Tan, K. B. (2020). 40-Year Projections of Disability and Social Isolation of Older Adults for Long-Range Policy Planning in Singapore. *International Journal of Environmental Research and Public Health*, *17*(14), Article 14. https://doi.org/10.3390/ijerph17144950

Piedra, L. M., & Iveniuk, J. (2025). Social Network Types and Self-Rated Health Among Diverse Older Adults: Stability, Transitions, and Implications for Health Equity. *Innovation in Aging*, *9*(6), igaf025. https://doi.org/10.1093/geroni/igaf025

Puyané, M., Chabrera, C., Camón, E., & Cabrera, E. (2025). Uncovering the impact of loneliness in ageing populations: A comprehensive scoping review. *BMC Geriatrics*, *25*, 244. https://doi.org/10.1186/s12877-025-05846-4

Routasalo, P. E., Savikko, N., Tilvis, R. S., Strandberg, T. E., & Pitkälä, K. H. (2006). Social Contacts and Their Relationship to Loneliness among Aged People – A Population-Based Study. *Gerontology*, *52*(3), 181–187. https://doi.org/10.1159/000091828

Shafeeq. (2025, May 23). More seniors in Singapore calling helpline over loneliness and mental health concerns: Charity. *The Straits Times*. https://www.straitstimes.com/singapore/more-seniors-calling-helpline-over-loneliness-and-mental-health-concerns

Sng, E. (2024, October 18). "A silent epidemic": Why loneliness is on the rise in a hyperconnected world. *CNA*. https://www.channelnewsasia.com/today/ground-up/why-loneliness-rising-hyperconnected-world-4684716

Taylor, E., Goodwin, V. A., Ball, S., Clegg, A., Brown, L., & Frost, J. (2024). Older Adults' Perspectives of Independence Through Time: Results of a Longitudinal Interview Study. *The Gerontologist*, *64*(2), gnad073. https://doi.org/10.1093/geront/gnad073

Teo, J. (2026, May 7). Bedok, Bukit Panjang, Tiong Bahru-Redhill designated as Age Well Neighbourhoods. See what's coming up. *The Straits Times*. https://www.straitstimes.com/singapore/bedok-bukit-panjang-and-tiong-bahru-redhill-designated-as-age-well-neighbourhoods

Vaithianathan, R., Hool, B., Hurd, M. D., & Rohwedder, S. (2021). High-frequency Internet Survey of a Probability Sample of Older Singaporeans: The Singapore Life Panel®. *The Singapore Economic Review*, *66*(06), 1759–1778. https://doi.org/10.1142/S0217590818420043

Wood, G. E. R., Pykett, J., Daw, P., Agyapong-Badu, S., Banchoff, A., King, A. C., & Stathi, A. (2022). The Role of Urban Environments in Promoting Active and Healthy Aging: A Systematic Scoping Review of Citizen Science Approaches. *Journal of Urban Health*, *99*(3), 427–456. https://doi.org/10.1007/s11524-022-00622-w

Zhang, Y., Kuang, J., Xin, Z., Fang, J., Song, R., Yang, Y., Song, P., Wang, Y., & Wang, J. (2023). Loneliness, social isolation, depression and anxiety among the elderly in Shanghai: Findings from a longitudinal study. *Archives of Gerontology and Geriatrics*, *110*, 104980. https://doi.org/10.1016/j.archger.2023.104980

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ACKNOWLEDGEMENTS

We would like to thank the Agency for Integrated Care, Research and Analytics Department for providing input on questions that were used for this study, specifically the inclusion of social isolation and loneliness measures.

About the Centre for Research on Successful Ageing (ROSA)

ROSA is a multidisciplinary research centre based in SMU. It was established with an MOE Tier 3 social sciences research grant, as well as the generous support of The Ngee Ann Kongsi. Research at ROSA seeks to address how factors at the intersection of the built, social and lived environments can be leveraged upon to promote holistic well-being and healthy longevity in Singapore. Through close collaboration with government and other partner agencies, ROSA also aims to translate research insights into policy innovations that advance the well-being of older adults holistically and promote successful ageing in Singapore. ROSA brings together a diverse team of leading international and local researchers in ageing and age-related issues from various disciplines. Through empirical evidence derived from a longitudinal methodological approach, the multidisciplinary and multi-institutional research team advances propositions that promote successful ageing in Singapore.

This work was supported by The Ngee Ann Kongsi and the Ministry of Education, Singapore, under its Academic Research Fund Tier 3 program award reference number MOE2019-T3-1-006 (till 30 June 2026) and MOET32025-0004 (from 1 July 2026).

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