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Patterns of Activity Participation and the Well-being of Older Adults in Singapore

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SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

Key findings

- 1. Respondents were classified into three patterns of activity participation (i) *generally active*, (ii) *physically and digitally active*, and (iii) *digitally active*.
 - a. Respondents who were *generally active* were more likely to engage frequently in eight different activities (i.e., visiting family or friends, religious activities, group activities, physical activities, hobbies, spending time outdoors in parks / green spaces / nature, volunteering, and digital contact).
 - b. Those who were *physically and digitally active* were more likely to engage frequently in physical activities, hobbies, spending time outdoors, and digital contact.
 - c. Those who were *digitally active* were more likely to engage frequently in digital contact only.
- 2. The patterns of activity participation were associated with life satisfaction, a measure of well-being.
 - a. Respondents who were *generally active* or *physically and digitally active* were more likely to experience greater life satisfaction than those who were *digitally active*.
 - b. Those who were *generally active* had the highest average life satisfaction scores among the three groups, while those were *digitally active* had the lowest average score.
- 3. Our results suggest that engaging in a variety of activities is associated with higher levels of well-being, highlighting the importance of maintaining a balanced mix that integrates both physical and social components. Also, respondents who were classified as *generally active* or *physically and digitally active* generally tended to report higher education levels, live in more larger housing types, report better health, and have more close social ties than those who were only *digitally active*. These suggest that socioeconomic factors, health, and social ties collectively influence opportunities for activity participation.

Policy recommendations

- 1. Public health messaging should educate older adults in an accessible manner on the importance of diverse activities, while active ageing policies should ensure a balanced mix of social, physical, and cognitive elements to support overall well-being.
- 2. Preventive health strategies like Healthier SG should provide targeted support for older adults from lower socioeconomic backgrounds, who are experiencing poorer health, or are socially isolated. Social prescribing and community centre initiatives could empower these groups by fostering social ties and encouraging active engagement.

INTRODUCTION

Active engagement is a key dimension of successful ageing (Rowe & Kahn, 1997). The 2024 Ageing Well in Asia report by the Asian Development Bank (ADB) highlighted active engagement – specifically, participation in social activities within the community – as a key driver of older adults' well-being (ADB, 2024). It also emphasised the need for governments to play an active role in promoting active engagement through policies and programmes (ADB, 2024). Furthermore, with the spotlight on sustaining the well-being of societies that are ageing rapidly across the globe, it is important for policymakers to gain insight into the patterns of activity participation in older adults to enable ageing populations towards staying active, contributing to their communities, and flourishing in an age-friendly environment.

In Singapore, the Ministry of Health (MOH) has prioritised active ageing as part of its 2023 Action Plan for Successful Ageing. This strategy includes initiatives such as the establishment of Active Ageing Centres (AACs), the Live Well, Age Well programme, and the Seniors Go Digital movement, which support the different activities of older Singaporeans, such as social engagement, volunteering, physical activity, and digital connectivity (MOH, 2023). Therefore, local policies should strive to promote active engagement among older adults, such as through various activities that empower social agency, which enhances well-being (Straughan et al., 2024).

Active engagement and well-being

The activity theory of ageing proposes that older adults who have higher activity levels tend to experience higher levels of well-being (Diggs, 2008). Active engagement across physical, mental, and social domains has been consistently found to be associated with better overall well-being among older adults. For instance, studies have found positive associations between active engagement and mental well-being (Enamela et al., 2023; Ku et al., 2012), cognitive function (Fu et al., 2018; Hou et al., 2023; Lee & Kim, 2016; Su et al., 2018), functional ability (de Roos et al., 2018; Tomioka et al., 2017), physical and self-rated health (Ichida et al., 2013; López-Martí et al., 2022; Pino et al., 2014; Zhuang et al., 2014), and reduced frailty (Ng, 2015; Otones et al., 2020; Tarazona-Santabalbina, 2016; Theou et al., 2011). These findings underscore the benefits of being actively engaged in the community through a diverse range of activities.

Activity participation broadly refers to the act of engaging in a range of activities that encompass formal or informal social and recreational activities, such as those that involve social interactions with others in the community (Gough et al., 2021). However, measures of activity participation often vary in terms of the frequency and type of activities in the literature (Menichetti et al., 2016; Monteiro et al., 2024). Given the heterogeneity in the types and variations of activities across different populations, it is crucial to identify profiles of activity participation that are distinct for older adults in Singapore (Chia et al., 2024). This approach contributes to the literature by producing a more precise prediction of how activity engagement relates to well-being and clarifying the differential importance of specific activity classes for older adults. To address the heterogeneity in activity participation patterns, recent studies have utilised latent class analysis (LCA) to uncover classes of activity profiles and their associations with well-being outcomes (Chen et al., 2022; Han et al., 2022; Hong et al., 2020; Park et al., 2018).

Objective of study

Much effort has been dedicated towards supporting older Singaporeans towards remaining active and engaged in their lives and communities. However, there is limited understanding on the extent of these activities in influencing well-being, and how different combinations of activities collectively influence well-being for older adults in Singapore. These underscore the need to examine how different subgroups of the population remain active in their communities. Our research aim is therefore twofold. First, we seek to understand underlying patterns of activity participation among older adults in Singapore. Second, we aim to examine how these patterns are related to their overall well-being. Understanding these issues enables policymakers and community partners to identify facets of the social environments that may encourage older adults to be active in their communities, ultimately enhancing their community participation for successful and healthy ageing.

METHOD

Data

We utilised data from the Singapore Life Panel ® (SLP), a monthly panel survey that is representative of the older population in Singapore, with over 8,000 responses collected in each month (Vaithianathan et al., 2021). In the current study, we utilised data that was collected in August 2023. In this dataset, the age range of the respondents was between 57 and 76 years old. After performing the necessary data cleaning, we finally yielded a sample size of 5,752 respondents.

Variables

Activity participation

We asked participants about the frequency of participation for each activity on a fivepoint scale (1 = never, 2 = one to three times a month, 3 = once a week, 4 = several times per week, 5 = daily). This comprised eight activities: visiting family or friends, religious activities, group activities, physical activities, hobbies, spending time outdoors in parks / green spaces / nature, volunteering, and digital contact. We selected these activities based on literature documenting their positive impacts on older adults' well-being, such as those involving social engagement (Berkman & Krishna, 2014), physical fitness (Bae et al., 2017), and leisure (Kaliterna Lipovčan et al., 2018).

Life satisfaction

We operationalised well-being using one question measuring life satisfaction. We asked the respondents, "how satisfied are you with your life as a whole these days?", to which they indicated one out of the following options on a five-point scale (1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, 5 = very satisfied).

Analytical strategy

Latent class analysis (LCA)

We applied latent class analysis on the activity participation variables. We first dichotomised activity participation responses into two groups for parsimony: (i) more frequent: daily, several times per week, and once a week and (ii) less frequent: one to three times a month and never. Latent class analysis is a statistical technique that identifies the probability of class memberships within a sample, based on patterns of survey responses (Weller et al., 2020). In other words, this technique allowed us to identify underlying patterns of activity participation among the respondents and classify these patterns into the probability of belonging to a particular class category. We assessed the model iteratively, comparing different number of classes using Akaike (AIC) and Bayesian (BIC) Information Criteria, as well as sample size-adjusted BIC (SABIC), where lower values suggest better models. The Lo-Mendell-Rubin likelihood ratio test (LMR LRT) determines if adding more classes improves model fit, with a statistically significant result indicating that the more complex model would be favoured over a simpler one. In addition, we considered entropy as a measure of classification accuracy. Although no universally agreed-upon cut-off exists, values below .60 are generally considered unacceptable, while values of .80 or higher are deemed acceptable (Weller et al., 2020).

Predictors of life satisfaction

We first assessed the association between class membership and sociodemographic variables using Cramer's *V*, in which we further examined statistically significant associations of at least .10, indicating at least a small effect size. Next, we performed an ordinal regression to model the relationship between the obtained class memberships and life satisfaction. In addition to class memberships as predictors of life satisfaction, we adjusted the model for a set of sociodemographic variables to account for other variations in life satisfaction.

FINDINGS

Latent class analysis

In latent class analysis, we tested models iteratively to compare models with different number of classes (see Table 1). We selected the three-class solution for its relatively high entropy value and in consideration of the relatively lower AIC, BIC and SABIC values. Although the LMR-adjusted LRT indicated that a four-class model was significantly better than a three-class one, we retained the three-class model. This decision was informed by its higher entropy that was closer to .80, and the clearer interpretability of the classes, thereby requiring a balanced consideration of both model fit and conceptual clarity (Collins & Lanza, 2009). As such, we identified three distinct patterns of activity participation among the respondents.

Classes	AIC	BIC	SABIC	Entropy	LMR LRT	Bootstrapped LRT
2	44483.953	44703.644	44598.780	0.802	< .0001	< .0001
3	43332.635	43718.759	43534.452	0.792	< .0001	< .0001
4	42908.165	43460.722	43196.973	0.704	.0236	< .0001
5	42753.980	43472.968	43129.776	0.663	.5888	< .0001

 Table 1. Model fit statistics for latent class analysis.

Table 2 lists the probabilities at which the respondents belonged to each class based on their level of participation for each activity (more frequent). First, we observed that the respondents in Group 1 were likely to participate in all activities more frequently. Second, the respondents in Group 2 were likely to participate in physical activities and hobbies, spend time outdoors, and engage in digital contact more frequently. Finally, those in Group 3 were likely to only participate in digital contact more frequently. As such, we labelled Groups 1, 2, and 3 as *generally active, physically and digitally active*, and *digitally active*, respectively.

	Probability (more frequent)			
Activity	Group 1	Group 2	Group 3 Digitally active	
	Generally active	Physically and digitally active		
Visiting family or friends	.89	.47	.29	
Religious activities	.79	.23	.16	
Group activities	.77	.19	.06	
Physical activities	.95	.95	.14	
Hobbies	.94	.60	.15	
Spending time outdoors	.92	.76	.04	
Volunteering	.53	.03	.02	
Digital contact	.97	.96	.82	

Table 2. Probabilities of class membership based on participation in activities.

Note. Probabilities range between 0 and 1 inclusive. Probabilities of more than .50 indicate "more frequent" participation.

Next, we obtained the composition of the sample in the three groups, as shown in Table 2. We found that 9.93% of respondents were likely to be classified in Group 1 (generally active), 47.57% in Group 2 (physically and digitally active), and the remaining 42.51% in Group 3 (digitally active) (see Table 3).

We further examined the sociodemographic characteristics of the respondents in each group (see Table 3). First, we tested for bivariate associations between class membership and each sociodemographic characteristic and found that class membership was associated with all sociodemographic characteristics (p < .001). Second, we examined column proportions to observe how each characteristic varied across the groups. Using Cramer's *V*, we found small effect sizes for associations ($V \ge .10$) between class membership and (i) education level, (ii) housing type, (iii) self-reported health, and (iv) number of close social ties.

Sociodemographic characteristic	Group 1 <i>Generally active</i> <i>n</i> = 571 (9.93%)	Group 2 Physically and digitally active n = 2,736 (47.57%)	Group 3 Digitally active n = 2,445 (42.51%)	Cramer's V
Age group (in years)				
57 – 61	87 (15.24)	471 (17.21)	534 (21.84)	
62 – 66	175 (30.65)	937 (34.25)	840 (34.36)	.056
67 – 71	190 (33.27)	773 (28.25)	645 (26.38)	
72 – 76	119 (20.84)	555 (20.29)	426 (17.42)	
Sex				
Female	333 (58.32)	1,324 (48.39)	1,416 (57.91)	.096
Male	238 (41.68)	1,412 (51.61)	1,029 (42.09)	
Ethnicity				
Chinese	469 (82.14)	2,494 (91.15)	2,110 (86.30)	
Malay	39 (6.83)	84 (3.07)	167 (6.83)	.078
Indian	48 (8.41)	109 (3.98)	134 (5.48)	
Others	15 (2.63)	49 (1.79)	34 (1.39)	
Education level				
No formal schooling / primary education	110 (19.26)	406 (14.84)	710 (29.04)	
Secondary education	235 (41.16)	1,100 (40.20)	1,105 (45.19)	.157
Tertiary education (without university)	114 (19.96)	667 (24.38)	407 (16.65)	
University education	112 (19.61)	563 (20.58)	223 (9.12)	
Housing type				
1- / 2- / 3-room HDB flat	93 (16.29)	325 (11.88)	580 (23.72)	4 5 4
4- / 5-room HDB flat	351 (61.47)	1,745 (63.78)	1,632 (66.75)	.104
Private housing	127 (22.24)	666 (24.34)	233 (9.53)	

Table 3. Sociodemographic characteristics of latent classes (n = 5,752).

Employment status				
Unemployed	300 (52.54)	1,433 (52.38)	1,077 (44.05)	.083
Employed	271 (47.46)	1,303 (47.62)	1,368 (55.95)	
Living arrangement				
Living with others	495 (86.69)	2,545 (93.02)	2,228 (91.12)	.067
Living alone	76 (13.31)	191 (6.98)	217 (8.88)	
Self-reported health				
Poor	8 (1.40)	74 (2.70)	208 (8.51)	
Fair	88 (15.41)	774 (28.29)	967 (39.55)	200
Good	234 (40.98)	1,230 (44.96)	923 (37.75)	.200
Very good	175 (30.65)	571 (20.87)	306 (3.18)	
Excellent	66 (11.56)	87 (3.18)	41 (1.68)	
Number of close relatives				
0	54 (9.46)	194 (7.09)	357 (14.60)	
1 – 2	169 (29.60)	898 (32.82)	886 (36.24)	.110
3 – 4	149 (26.09)	809 (29.57)	688 (28.14)	
5 or more	199 (34.85)	835 (30.52)	514 (21.02)	
Number of close friends				
0	76 (13.31)	444 (16.23)	702 (28.71)	
1 – 2	176 (30.82)	1,130 (41.30)	1,027 (42.00)	.153
3 – 4	139 (24.34)	661 (24.16)	420 (17.18)	
5 or more	180 (31.52)	501 (18.31)	296 (12.11)	
Number of close neighbours				
0	153 (26.80)	1,253 (45.80)	1,343 (54.93)	
1 – 2	192 (33.63)	971 (35.49)	762 (31.17)	.149
3 – 4	129 (22.59)	317 (11.59)	214 (8.75)	
5 or more	97 (16.99)	195 (7.13)	126 (5.15)	

Note. The figures in parentheses are column percentages.

Education level

First, we observed a greater proportion of respondents who attained tertiary or university education in Groups 1 and 2, as compared to Group 3 (see Figure 1). Conversely, the proportion of respondents who had no formal schooling or attained primary education was the highest in Group 3, across all three groups. These indicate that respondents in Groups 1 and 2 tended to be more educated than those in Group 3.



Figure 1. Distribution of education levels across the three classes of activity participation.

Housing type

Second, we found that a greater proportion of respondents in Groups 1 and 2 lived in private housing than those in Group 3 (see Figure 2). Moreover, the proportions of respondents who lived in HDB flats were the highest in Group 3, especially those living in smaller HDB flats (1 - / 2 - / 3-room HDB flats). These indicate that the respondents in Groups 1 and 2 tended to live in larger housing types than those in Group 3.



Figure 2. Distribution of housing types across the three classes of activity participation.

Self-reported health

Third, we compared the respondents' self-reported health across the three groups. From Figure 3, we observed that the largest proportion of respondents who reported their health as "good", "very good", or "excellent" belonged to Group 1. This proportion was lower for Group 2 and was the lowest in Group 3. Likewise, we found the greatest proportion of respondents who reported having "poor" or "fair" health in Group 3, and the corresponding proportions were lower in Group 2 and were the lowest in Group 1. Taken together, these trends indicate that most respondents in Group 1 tended to report having the best health, followed by those in Group 2, while those in Group 3 tended to report having the poorest health.



Figure 3. Variations of self-reported health across the three classes of activity participation.

Number of close social ties

Finally, we assessed the social networks of the respondents across the groups. We compared three types of social ties – the number of close relatives, friends, and neighbours – that the respondents had (see Figures 4, 5, and 6). We found similar trends in class membership across the three types of social ties. In general, Group 1 had the largest proportion of respondents with more than five social ties of all types, followed by Group 2, while Group 3 had the lowest share. Conversely, Group 3 had the largest proportion of respondents with no close social ties of all types. In terms of close friends and neighbours, we found that Group 1 had the largest proportion of respondents who had three to four close friends or neighbours, followed by Group 2, while Group 3 had the largest proportion of respondents who had three to four close friends or neighbours, followed by Group 2, while Group 3 had the lowest share.

Taken together, these findings indicate that respondents belonging to Group 1 tended to have larger social networks, whereas those in Group 3 tended to have smaller ones.

Figure 4. Variations in the number of close relatives across three classes of activity participation.



Figure 5. Variations in the number of close friends across the three classes of activity participation.



Figure 6. Variations in the number of close neighbours across the three classes of activity participation.



Ordinal regression

Next, we examined variations in life satisfaction across the three groups (see Figure 7). The respondents in Group 1 had the highest average life satisfaction score, followed by those in Group 2, while those in Group 3 had the lowest. We performed a Kruskal-Wallis test and concluded that these differences were statistically significant (p < .001).

Figure 7. Average life satisfaction scores across the three classes of activity participation.



To determine whether class membership was associated with life satisfaction, we performed an ordinal regression predicting life satisfaction, adjusting for sociodemographic variables. Table 4 shows the results (odds ratios) of the regression analysis. We found that class membership was associated with life satisfaction. Specifically, compared to respondents in Group 3, those in Groups 1 and 2 were significantly more likely to experience greater life

satisfaction (odds ratios were 1.70 and 1.36, respectively). In other words, respondents from Group 1 were 1.70 times more likely to experience greater life satisfaction than those in Group 3. Accordingly, respondents from Group 2 were 1.36 times more likely to experience greater life satisfaction than those in Group 3.

Predictor	Odds ratio
Class membership (ref: Group 3: Digitally active)	
Group 1: Generally active	1.70***
Group 2: Physically and digitally active	1.36***
Age group	1.09**
Sex (ref: female)	
Male	0.82***
Ethnicity (ref: Chinese)	
Malay	2.89***
Indian	0.92
Others	1.84**
Education level (ref: no formal / primary education)	
Secondary education	1.10
Tertiary education (without university)	1.03
University education	1.19
Housing type (ref: 1-/2-/3-room HDB flat)	
4- / 5-room HDB flat	0.98
Private housing	1.02
Employment status (ref: unemployed)	
Employed	1.15*
Living arrangement (ref: living with others)	
Living alone	0.86
Self-reported health	3.91***
Number of close relatives	1.13***
Number of close friends	1.10**
Number of close neighbours	1.05

Table 4. Results from the ordinal regression model predicting life satisfaction (n = 5,752).

Note. * p < .05, ** p < .01, *** p < .001. Pseudo $R^2 = .1597$, p < .0001.

DISCUSSION

In summary, we found three patterns of activity participation among the respondents – generally active (Group 1), physically and digitally active (Group 2), and digitally active (Group 3). Furthermore, respondents who were *generally active* (Group 1) or *physically and digitally active* (Group 2) were more likely to experience greater life satisfaction than those who were *digitally active* only (Group 3). Similarly, those who were *generally active* (Group 1) were also found to report, on average, greater life satisfaction than those who were *physically and digitally active* (Group 2). In addition, we identified several sociodemographic characteristics that were associated with the respondents' patterns of activity participation, which include their education level, housing type, self-reported health, and the number of close social ties that they had.

Activity participation and life satisfaction

Our findings suggest that respondents who were likely to participate frequently in a broader range of activities were more likely to experience higher levels of well-being than those who participate in a limited number of activities. This is consistent with the activity theory of ageing, where it is not just activity levels that are associated with better well-being, but that it is also about maintaining a balance of physical, cognitive, and social activities (Diggs, 2008). Our study also found that different types of activities that older adults participate in may have differential implications to their well-being (Ryu & Heo, 2018). Accordingly, our findings revealed a potential typology of activity participation, where an increased mix of activities are associated with better life satisfaction.

Social participation

Respondents who were likely to participate in activities that were related to social interactions (Group 1: generally active) reported, on average, greater life satisfaction than those who were *physically and digitally active* (Group 2) and *digitally active* (Group 3). Social activities provide older adults with opportunities to adopt important social roles within social networks that influence their well-being (Berkman & Krishna, 2014; Huxhold et al., 2014). For example, volunteering may cultivate a sense of helpfulness, thereby enabling older adults to become more integrated within their communities (Nuqoba et al., 2024). Engaging in multiple roles with purposeful activities can enhance their sense of belonging and value within both their family and the broader community (Owen et al., 2022). With age, lifestyle transitions may result in the shrinkage of their social networks, such as during retirement or the loss of significant others, which may put older adults at risk of social isolation (Cornwell et al., 2008; Rowe & Kahn, 1997).

Engagement in physical activities

We also observed that respondents who were likely to participate frequently in physical activities (Group 2: generally active) reported, on average, greater life satisfaction than those who were not (Group 3: digitally active). In the literature, physical activities like exercise are known to be pro-health behaviours that are beneficial for physical and psychological well-being for older adults (Bae et al., 2017). Higher levels of physical activity are known to be

associated with reduced inflammation, lower levels of distress, decreased frailty, and fewer depressive symptoms among older adults (Tolley et al., 2021; Whitehead & Blaxton, 2017). It is also possible that older adults who engage in physical activities generally exhibit better health, potentially contributing to higher levels of life satisfaction, as compared to those who do not participate in such activities.

Although the respondents who were *physically and digitally active* (Group 2) and digitally *active* (Group 3) might be socially connected via digital means, they might not fully benefit from in-person social engagement. Our study contributes to the literature on digital connectivity for older adults, highlighting the complementary role of face-to-face interactions and digital tools (Gauthier et al., 2022). The integration of in-person social engagement with digital technology is likely to contribute to greater life satisfaction than digital connectivity alone. In other areas, our findings also support the literature where activity participation should be holistic; older adults should engage in a variety of activities that integrate physical and social components to reap the benefits for their well-being (Inoue et al., 2024).

Sociodemographic characteristics and activity participation

We found a greater proportion of respondents who had (i) attained higher levels of education, (ii) resided in larger housing types, (iii) reported greater health, and (iv) a greater number of close social ties to be classified as being *generally active* (Group 1) or *physically and digitally active* (Group 2), than to be *digitally active* only (Group 3). We therefore propose that socioeconomic background, health, and social connections are closely associated with activity participation.

Our findings suggest that respondents from more affluent backgrounds may have access to a broader range of resources that facilitate activity participation (Cerin & Leslie, 2008). They may also benefit from having social connections that extend beyond their neighbourhoods, including professional and club networks (Ngu et al., 2023). We also note an unexpected finding that respondents from less affluent backgrounds were nonetheless likely to be digitally active, despite the barriers of technology use (e.g., high costs of digital devices, low digital literacy). This finding may be explained by the extensive support that older Singaporeans from lower-income backgrounds receive from national initiatives, such as the Mobile Access for Seniors scheme, which provides low-cost mobile data plans (\$\$5.10 per month), smartphones (one-time cost starting from S\$20.00), and in-person training on digital communication (Infocomm Media Development Authority, 2024). These initiatives may render digital communication a convenient and inexpensive option for respondents from less affluent backgrounds to remain engaged. In terms of health, individuals in better physical and psychological health are likely to have greater capacity to engage in a wider range of activities, thereby encouraging pro-health behaviours (Lorem et al., 2020). Those with strong social ties—such as relationships with family, friends, or neighbours—may benefit from emotional support or social influence to engage in more pro-health behaviours, which may, in turn, encourage more active participation.

Taken together, these associations indicate that socioeconomic, health, and social factors are likely to collectively influence opportunities for activity participation, which may lead to greater community engagement and well-being.

Policy recommendations

As Singapore prepares to receive a superaged society, active engagement is and will be a strategic priority towards advancing successful ageing. Given that our analyses suggest that participating in activities that involve social and health-related aspects may be conducive for well-being, we propose the following policy recommendations:

- Public health messaging could prioritise educating the older population in an accessible way – on the importance of engaging in a variety of activities. Simultaneously, active ageing policies may consider a more deliberate approach in planning activities, ensuring that they incorporate a balanced mix of social, physical, and cognitive elements. This intentional design could foster a more holistic experience, thereby supporting overall wellbeing among older adults.
- 2. Existing preventive health strategies (e.g. Healthier SG) which promote active ageing should be complemented with targeted support for older adults facing poorer health, social isolation, or those from lower socioeconomic backgrounds. Social prescribing, for example, may empower these vulnerable groups to engage in activities tailored to their capabilities. Additionally, organisations like community centres could encourage older residents to volunteer and form connections with these vulnerable individuals. This could help sustain social networks and motivate continued participation in social activities, thereby promoting active engagement within the community.

Limitations

We note several limitations in this study. The activities that were measured may not fully capture the diversity of older adults' lifestyles, thus potentially oversimplifying the classification of activity patterns and leaving other dimensions of active participation unexplored. Additionally, the LCA assumes homogeneity within each group, though there is likely variation in activity participation, as LCA only provides probabilistic classifications. Future studies could examine how different classes of activity participation relate to various aspects of well-being.

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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 define and measure a holistic construct of well-being and to identify the factors that impact Singaporeans' well-being as they progress through the later phases of life. Through close collaboration with government and other partner agencies, ROSA also aims to translate research insights into policy innovations that advance the wellbeing 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 agerelated 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.

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