8-2022

Life in an endemic COVID-19: Older adults' well-being, activity, and perceptions

Rachel NGU
Singapore Management University, rachelngu.2017@socsc.smu.edu.sg

Micah TAN
Singapore Management University, micahtan@smu.edu.sg

Jia Ying LOW
Singapore Management University, jiayinglow@smu.edu.sg

SMU
SINGAPORE MANAGEMENT UNIVERSITY

Centre for
Research on
Successful Ageing

ROSA Research Brief Series
AUG 2022

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Summary of Findings and Recommendations

The current research brief provides a preliminary examination of whether older adults have been able to 'return' to the pre-pandemic way of life in an endemic COVID-19. To do this, we look at several key indicators, including (1) tracking older adults' overall life satisfaction, activity levels, and trust in government over the past 3 years, (2) older adults' confidence to resume activities, as well as subjective perceptions about their safety when leaving the home in an endemic COVID-19, and (3) older adults' ability to adhere to the Home Recovery Program (HRP), where individuals with COVID-19 are able to recover from the virus at home rather than in an isolation facility. We make use of data from the Singapore Life Panel®, with an average of 7078 respondents participating across all months of data utilized for our analysis.

Key findings

1. While results illustrate that respondents' levels of activity and well-being have recovered since the peak of the pandemic in 2020, we observe that they remain at levels slightly below pre-COVID levels. This potentially indicates that despite the relaxation of restrictions and moving into the endemic phase of COVID-19, older adults have yet to be able to return to their pre-COVID way of life.

2. This is potentially due to lingering apprehension to and difficulties faced in resuming activities despite restrictions having been reduced.

    a. Trust in the government's response to COVID-19 was lower in 2022 compared to early in the pandemic, with 67% of respondents 'somewhat' or 'completely' trusting in the government's response to COVID-19 in April 2022, compared to over 75% in November 2020.

    b. While about 80% of respondents surveyed in March 2022 felt fairly or very confident in resuming household visits, outdoor activities, visiting malls, dining in, and social gatherings, smaller proportions felt confident resuming religious activities (71.92%), exercise activities (64.24%), performances and events (63.72%), and overseas travel (54.32%).

    c. More than 80% of respondents slightly agree, agree or strongly agree that they feel safe from COVID when they step out of their homes. However, 75% of respondents who did not trust in the government's response to COVID-19 at all did not agree that they feel safe from COVID-19 when leaving the home in April 2022, compared to just 4.91% of those who trust in the government's response completely.

d. A large majority of respondents agreed (slightly agreed, agreed, or strongly agreed) that it was easy to adhere to the HRP. However, among those who disagreed, respondents who were less educated were more likely to disagree.

Policy recommendations

Based on these findings and with the aim of supporting older adults to 'resume' normal life with an endemic COVID-19, we therefore make the following recommendations;

1. Greater assurances should be provided to older adults about the safety of the resumption of activities, especially for older adults greater in age, and who are less educated. This is likely to be important in ensuring that more older adults feel confident and safe in 'resuming' normal life and learn to live with an endemic COVID-19.

2. The level of trust that respondents have in the government's response to COVID-19 is found to be an important factor shaping the confidence that respondents have in participating in activities with an endemic COVID-19, as well as how safe they feel from COVID-19 when leaving the house. Trust is an important factor as not trusting the efficacy of the various measures that the government has maintained to contain and prevent the spread of COVID-19 in the endemic phase potentially leads to negative perceptions of safety. More effort should be made to build older adults' trust in the government's response so as to assure more older adults about the safety of living with an endemic COVID-19 as well.

3. Finally, in terms of adherence to the HRP, we find that less educated respondents were more likely to find it difficult to adhere to the HRP. Further research is needed to uncover exactly why such respondents find it more difficult to comply, but in general this suggests that greater support should be provided to such respondents to help them adhere to the HRP.

Introduction

It has now been more than two years since the coronavirus (COVID-19) first emerged in Wuhan, China in late December 2019 and became a worldwide health emergency (Palacios Cruz et al. 2020). While the effects of the pandemic cannot be understated with a total of 535,248,141 confirmed COVID-19 cases and 6,313,229 deaths resulting worldwide as of 16 June 2022 (World Health Organization n.d.), many countries have since shifted to treating COVID-19 as an endemic disease, Singapore included. However, the question remains as to whether we have truly been able to shift to treating COVID-19 as an endemic disease where we are able to return to 'normalcy', or if we are still beholden to COVID-19. This is an important question given the significant impact that the COVID-19 pandemic has had on the well-being of people, particularly for older adults who have been identified as a vulnerable population during the COVID-19 pandemic (Lee et al. 2022). This report thus aims to broadly examine the question of whether older adults in Singapore have been able to resume normalcy in their daily lives given that the country has fully transitioned to the endemic phase. This is done by examining the following three topics;

1. Have older adults in Singapore been able to 'resume normal activities'?

   Since July 2021, Singapore has gradually adopted the strategy of living with COVID-19 as an endemic disease. With 92% of its population being fully vaccinated with two doses of vaccine and 77% of its population having received the booster vaccine, 99.7% of people who tested positive for COVID-19 had no or mild symptoms in June 2022 (Ministry of Health 2022b). Given these assurances, most safe management measures within the community have been removed and most activities have resumed albeit with several lingering measures. The impact of the removal of most of the measures on the daily lives of older adults has, however, yet to be examined. As such, to determine if older adults have been able to 'resume' pre-covid levels of activity and other aspects of their daily lives, we will explore the trends in well-being of older adults, the trends in the resumption of activities, and the level of trust that older adults have in our government in response to the COVID-19 situation since the start of the pandemic till the present endemic stage.

2. Safety and Resumption of Activities Within the Community

   In addition to the resumption of activities and 'normalcy', we also look at how older adults' perceive the viability of living with 'endemic' COVID-19 – particularly, whether they feel confident about resuming activities, or if their reservations with regard to participating in activities still persist. Additionally, we also look at their sense of safety from COVID-19 when leaving the house with the current safe management measures

within our community – important factors in enabling older adults to live with an endemic COVID-19.

3. Home Recovery Programme

The Home Recovery Programme (HRP) allowed for Singapore residents with COVID-19 to recover at home, rather than at an isolation facility or hospital. It was implemented from 30 August 2021 as a pilot scheme, and later on as the default care arrangement for fully vaccinated individuals aged 12 to 50 who test COVID-19 positive in a bid to protect Singapore's overall healthcare capacity (Ministry of Health 2021). Gradually, the government opened the programme to include most individuals who are deemed low risk. As of the 25th of April 2022, the HRP is the default care arrangement for all individuals except those who are partially vaccinated or unvaccinated and aged 80 years and older, children aged less than 3 months old, pregnant women 36 weeks and above and partially vaccinated or unvaccinated pregnant women (Ministry of Health 2022a).

Given that being able to participate in the HRP confidently is an important aspect of living with an endemic COVID-19, we also examine how older adults have been coping with the HRP and the potential difficulties that older adults may experience in trying to adhere to the HRP.

This research brief will hence examine these three topics using data from the Singapore Life Panel (SLP), a monthly panel survey that has been conducted since 2015 (see Vaithianathan et al. (2018) for details regarding sample recruitment). Respondents are part of a large sample of Singaporeans aged 57 to 76 and their spouses. About 7000 to 7500 respondents participate in the SLP survey every month. This paper uses the survey data collected from January 2019 to April 2022, where approximately 7078 respondents participated on average each month. Before presenting the findings of the surveys that were fielded, however, we will first present a brief timeline of COVID-19 in Singapore so far in order to contextualize the discussion.

COVID-19 in Singapore so far – See **Figure 2** on page 8 for a graphical timeline

Singapore's first Covid-19 case was detected on 23 January 2020, and by 1 April 2020, 1000 cases were reported within the country (Tan, Straughan, and Cheong 2022) (see figure 1 below for an overall timeline of the daily new cases in Singapore). The total number of confirmed COVID-19 cases that were reported in Singapore from the start of the pandemic till 16 June 2022 is 1,321,146 and the total number of reported deaths resulting from Covid-19 is 1393 (World Health Organization n.d.). For a while, Singapore had the highest number of Covid-19 cases within Southeast Asia outside of China from 5 February 2020 – 18 February 2020 (Lee, Chiew, and Khong 2020). The number of COVID-19 cases continued to fluctuate

and like other countries around the world, new variants of the virus such as the Delta variant and the Omicron variant emerged in Singapore, resulting in subsequent waves of COVID-19 infection that eventually subsided. Most recently, in the 28 days leading up to 8 June 2022, 96,952 individuals were infected with COVID-19. While this number is relatively high compared to Singapore's caseload earlier in the pandemic during 2020, 99.7% of those infected had no or mild symptoms (Ministry of Health 2022b), likely due to the high vaccination rate in Singapore. Thus, despite there still being a large number of new COVID-19 cases, the severity of the cases has declined dramatically.

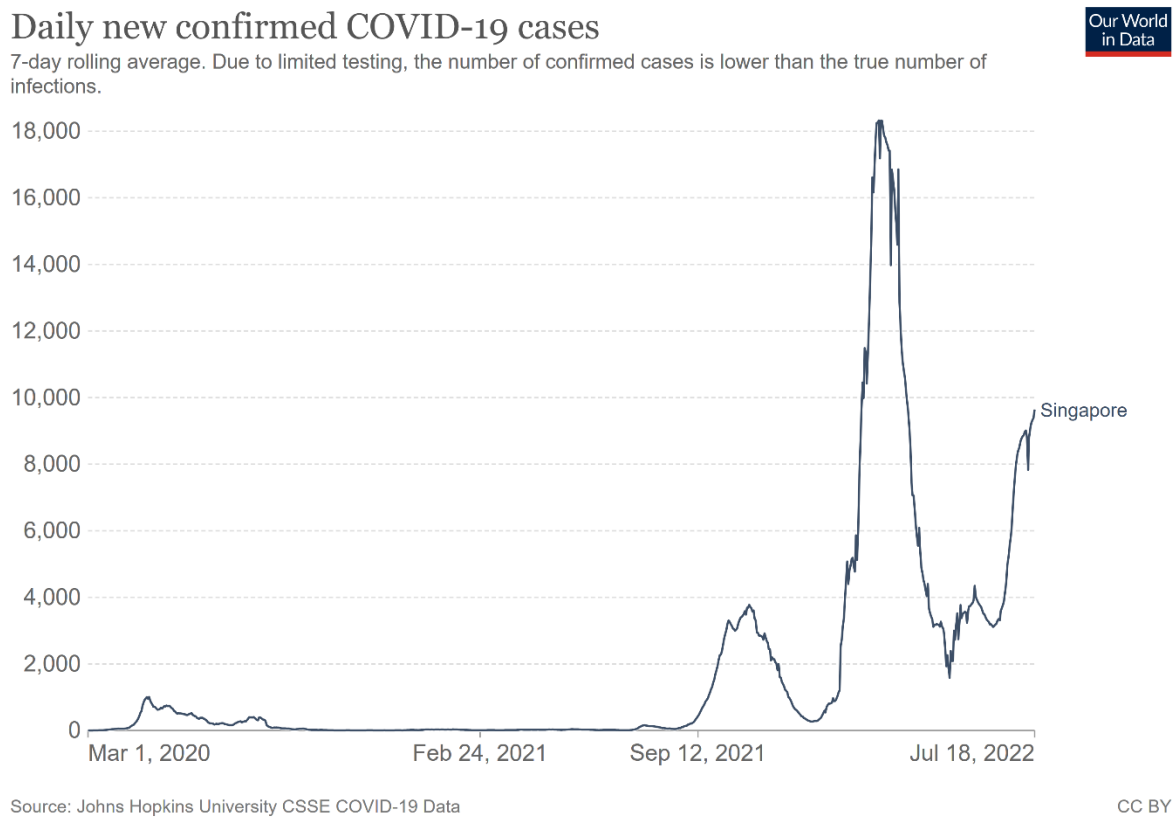

Figure 1: Daily new COVID-19 cases in Singapore from March 2020 to June 2022

Shortly after COVID-19 cases were first detected in Singapore, a series of community safe management measures were implemented. Due to a surge in the number of COVID-19 cases from early April 2020, a lockdown was implemented between 7 April 2020 and 1 June 2020, and Singaporeans were only permitted to leave their homes for essential activities. Subsequently, a three-phased approach was implemented to ease Singaporeans back to their normal daily lives. Phase one of Singapore's reopening began on 2 June 2020. Up to two immediate family members were allowed to visit each household. Workplaces and schools reopened, and schools adopted home-based learning as an alternate learning approach. Phase two started on 19 June 2020. During phase two, up to five Singaporeans were permitted to gather and certain social activities were allowed in the community. With the decrease in the number of COVID-19 cases to single digit cases, at the end of November 2020,

Singapore transitioned to phase three on December 2020, where more social activities were allowed to resume in larger groups. During this phase, on 30 December 2020, the Covid-19 vaccination campaign was also introduced. Vaccinations were made available to all Singaporeans for free. Vulnerable groups of people including the elderly, frontline workers of healthcare settings and persons with medical comorbidities were given priority to receive vaccination (Ministry of Health 2022b). However, on 8 May 2021, with the emergence of the Delta variant in Singapore, community measures were tightened once again. For example, social gatherings were capped at five people, and subsequently two people at any one point. Starting in August 2021, Singapore adopted an additional three stages of community reopening as part of its attempt to treat COVID-19 as an endemic. The stages of reopening can be seen in figure 2. In the preparatory stage and stabilization phases, fully vaccinated people could gather in groups of up to five and the government ceased reporting the number of unlinked COVID-19 cases within the community. In the stabilization phase, groups could gather and dine in at food and beverage establishments in groups of up to five people. The Home Recovery Programme was also extended to include those aged between 51 to 80 years old.

In the final transition phase which began on 29 March 2022, community safe management measures were significantly eased (Ministry of Health 2022b). Restrictions that were eased include removing the limit on group sizes for gatherings up from a limit of 10 people per group, removing vaccinated differentiated measures for all settings except for events with more than 500 people, and removing contact tracing in public spaces. Mask wearing continues to be compulsory in indoor settings when people leave their homes but has become optional in outdoor settings. Additionally, all workers who are eligible to work from home can now return to the workplace. Maintaining a safe distance of 1 meter between individuals which was required since the beginning of the pandemic was also no longer required (Ministry of Health 2022b).

As of 20 June 2022, Singapore remains in this transition phase with most measures having been removed and with only the most basic measures such as mask wearing in indoor settings remaining. In this stage, many activities and events that had been suspended throughout the COVID-19 pandemic have finally resumed in recent months, especially for older adults in the community. For instance, in-person activities for older adults run at various community centers in Singapore (such as yoga classes, line dancing, or other exercise classes) were finally piloted in November 2021 and fully resumed in 2022 (Tjendro 2021). Given this, it is therefore of interest to examine if the resumption of activities has led to improvements in the well-being of older adults as many studies have illustrated how the pandemic led to a decline in their well-being.

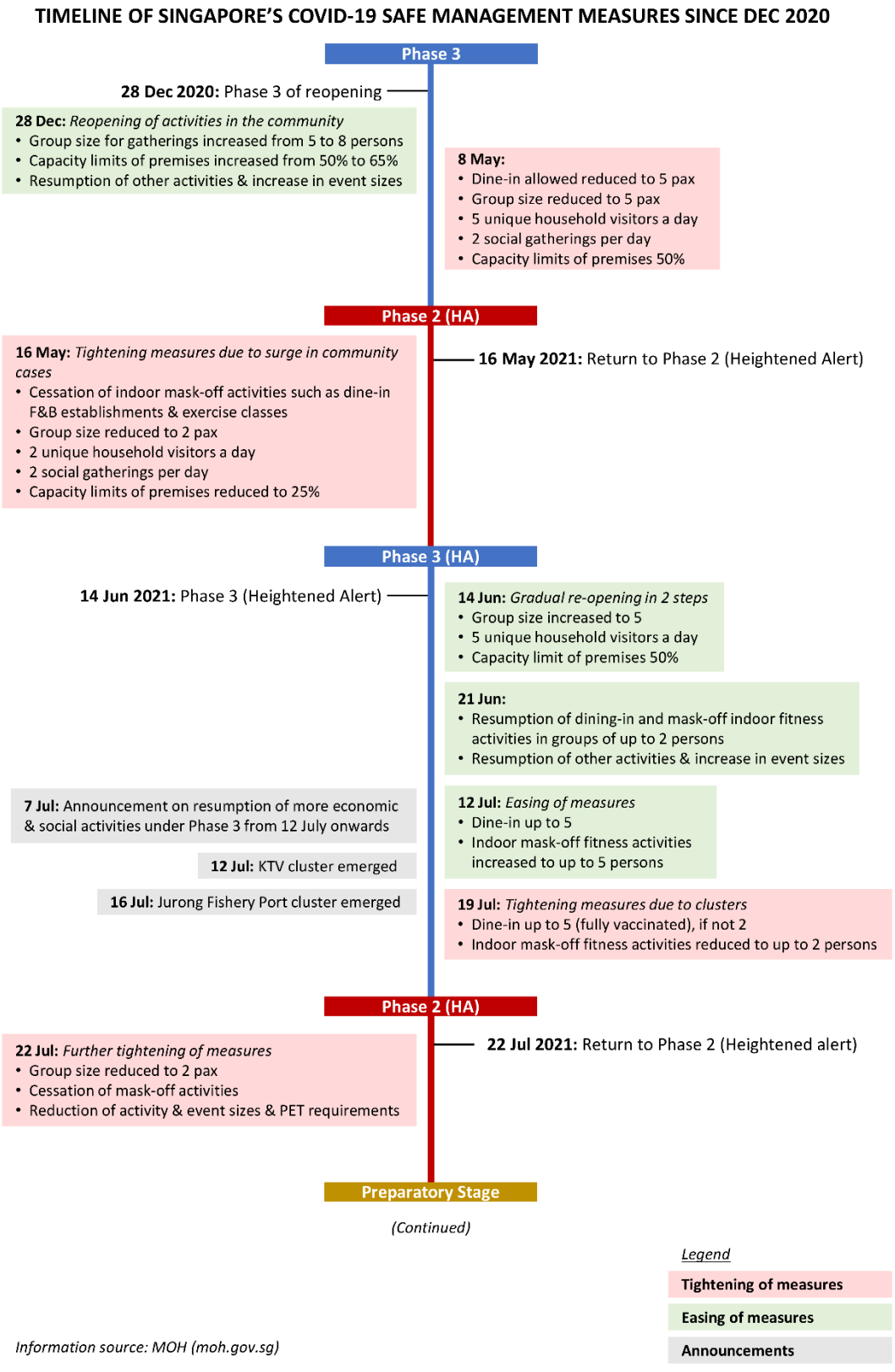

Figure 2: Timeline of Singapore's COVID-19 safe management measures since December 2020 (part 1)

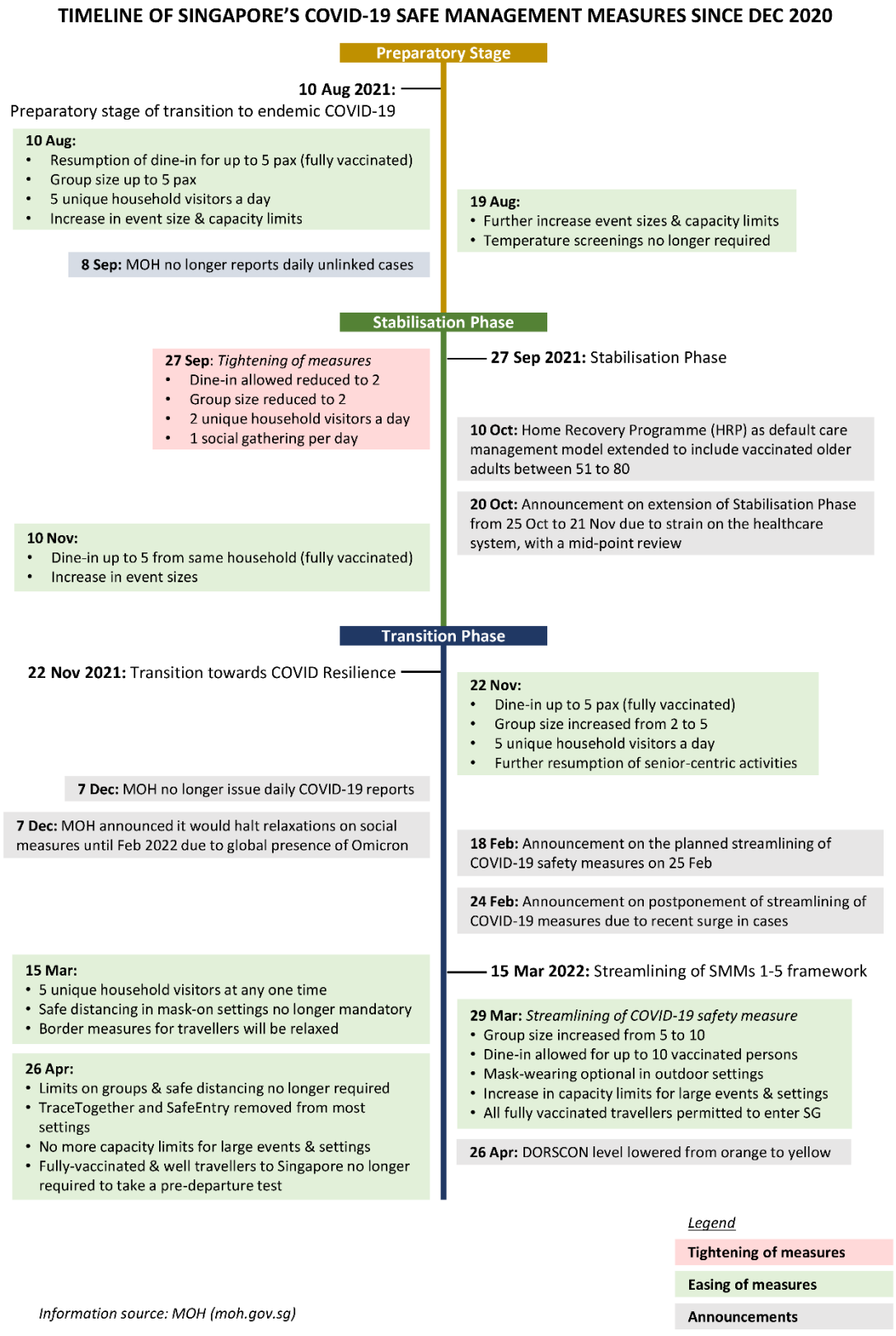

Figure 2: Timeline of Singapore's COVID-19 safe management measures since December 2020 (part 2)

Findings

Are well-being, social activities and trust in government returning to pre-COVID levels for older adults in Singapore?

We first began our investigation into whether older adults had managed to resume a sense of 'normalcy' in their daily lives in an endemic COVID-19 by observing the trends in the overall life satisfaction of our respondents from January 2019 to April 2022 as a means to compare current levels of well-being among our respondents to pre-COVID levels in 2019.

Well-being of older adults

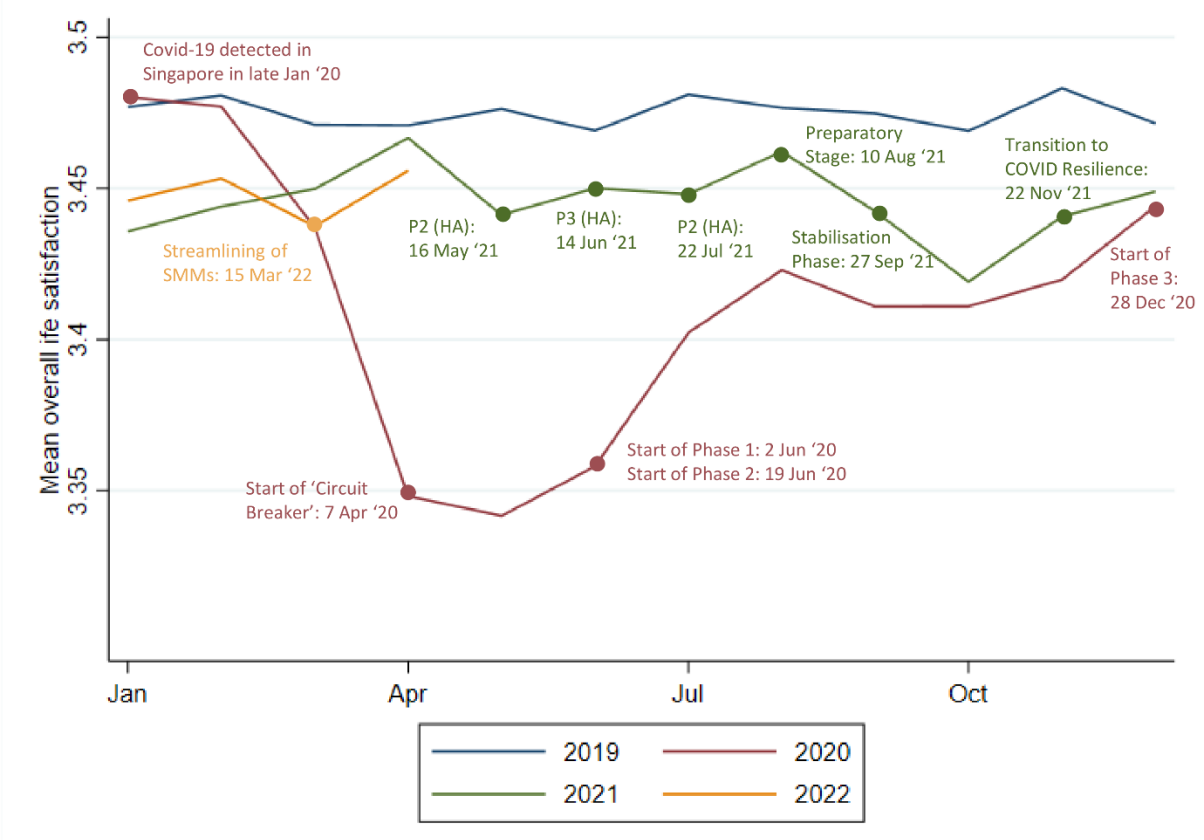

Figure 3: Longitudinal trend in average life satisfaction from January 2019 to April 2022. [1]

As can be seen in figure 3 above, while the average overall life satisfaction of respondents has recovered since the height of the pandemic during the circuit-breaker (as illustrated by the distinct 'U' shape trend in the red line), it nevertheless remains several points below pre-covid

[1] Respondents were to rate their overall life satisfaction with 1 representing "Very dissatisfied" and 5 representing "Very satisfied". Mean overall life satisfaction was derived by taking the mean overall life satisfaction score of all respondents for each month.

levels of average overall life satisfaction in April 2022. This is likely due to the unprecedented disruptions to their normal lives and the increase in social isolation as a result of various safe management measures (SMMs), which were enforced up till the end of April. In line with this trend, past studies across the globe have found that a decrease in social participation, decreased physical activity, and increase in sedentary lifestyle behaviours have led to poorer psychological health of older adults during the pandemic (Ammar et al. 2020; Flanagan et al., 2020). As such, while (as mentioned above) many restrictions on the daily lives of older adults have indeed been relaxed in 2022, some still remained in April 2022 which may explain the continued lower levels of overall life satisfaction. As Singapore continues to relax COVID-19-related restrictions and allow the resumption of more activities such as large events and travel, it is possible that an increase in life satisfaction may be observed as older adults grow more accustomed to living with a COVID-19 endemic.

Social activities

Given that participation in social activities was severely affected by COVID-19 restrictions, as well as the fact that levels of participation have been shown to be important in shaping the well-being of older adults (Huxhold, Miche, and Schüz 2014), we subsequently also sought to understand how the frequency of older adult participation in social activities had fared since Singapore entered the 'endemic' stage of COVID-19.

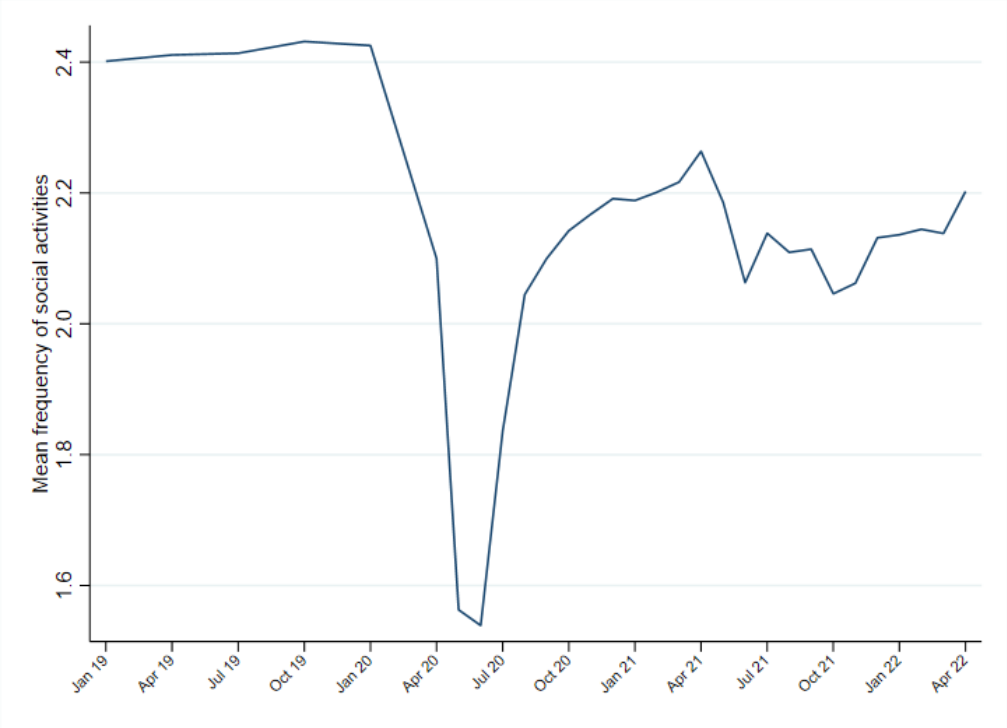

Figure 4: Longitudinal trend in average frequency of social activities from January 2019 to April 2022. [2]

Figure 4 above represents the average frequency with which respondents participated in social activities from January 2019 to April 2022. As observed, the average frequency of social activities that respondents engaged in experienced a decline from January 2020 onwards and has yet to return to pre-COVID levels. Following the steady increase from June 2020 to April 2021, the fluctuations that follow are likely due to the frequent changes in COVID-19 restrictions from May 2021 to the end of the year, including restrictions such as that on the maximum group size, rules on dining out and capacity limits. This directly affected social activities, preventing older adults from meeting with friends and family or participating in social activities that had largely moved online. As of April 2022, we observe that the frequency of participation in social activities among our respondents continues to be at several points below pre-covid levels.

As mentioned, participation in social activities is an important factor in shaping the well-being of older adults. The current findings imply that in order to ensure for their well-being, more should be done to allow and ensure for the safety and confidence of older adults in the resumption of social activities in the endemic phase.

[2] Respondents were asked to indicate how often they did each of the following activity: visiting friends or family, religious activities, group activities, physical activities, and hobbies respectively, from 1 “Never” to 5 “Daily”. The mean frequency of all 5 activities was derived for each respondent, and the mean frequency of all respondents for each month was derived. These questions were first fielded quarterly from January 2019, and monthly from April 2020 onwards.

Contacting people via digital technology

Communication through digital technology has also been identified as a means for older adults to circumvent restrictions on social activities and to maintain some social interaction despite such restrictions during the pandemic (Sixsmith et al. 2022). As such, we were also interested in examining if the use of digital technology to communicate with friends and family may have increased through the pandemic and into an endemic COVID-19.

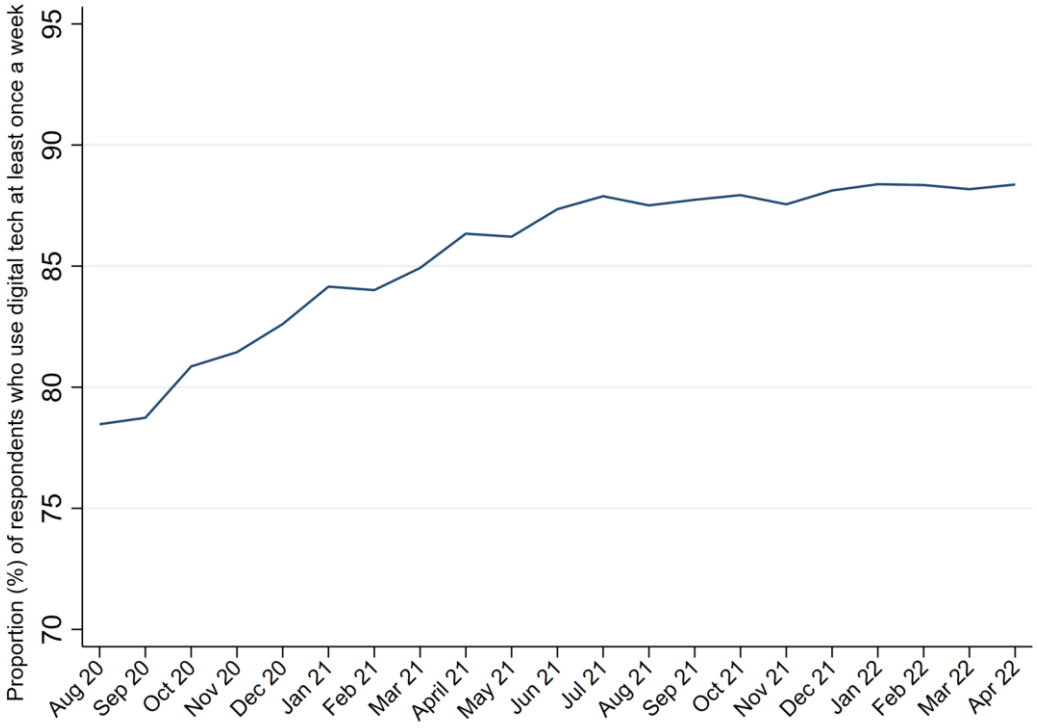

Figure 5: Longitudinal trend in proportion of respondents who contact people via digital technology at least once a week from August 2020 to April 2022.[3]

In contrast to the other social activities, the frequency of contacting people via digital technology appears to be in a consistent upward trend from August 2020 onwards with the proportion of older adults who contact people via digital technology at least once a week seeing an increase of approximately 10%, from slightly over 78% in August 2020 to over 88% in April 2022. This increasing trend perhaps indicates that older adults have managed to adapt to the challenges of in-person social interactions during COVID-19 and have learnt to use digital technology as a means of remaining socially connected. While we do not have pre-COVID data in order to compare this proportion with pre-COVID trends, the increasing proportion of respondents who use digital technology since August 2020 suggests that more older adults relied on digital communication as the pandemic wore on.

[3] The proportion of respondents was derived by taking the total number of respondents who contact people via digital technology at least once a week over the total number of respondents who responded to this question for each month.

Trust in government's response to COVID-19

While Singapore has indeed fully committed to treating COVID-19 as an endemic disease, this certainly does not mean that COVID-19 can be completely ignored. The arrival of Omicron subvariants BA.4 and BA.5 has been predicted to lead to a new wave of COVID-19 infections in Singapore in July and August 2022 (Leo 2022). It is thus likely that maintaining the trust of older adults in the government's response to COVID-19 will remain an important factor in determining their well-being as levels of trust in government have been shown to shape the adherence to and adoption of protective behaviour against COVID-19 (Lim et al. 2021). Thus, we also thought it prudent to examine how trust in government among respondents compared with earlier stages of the COVID-19 pandemic.

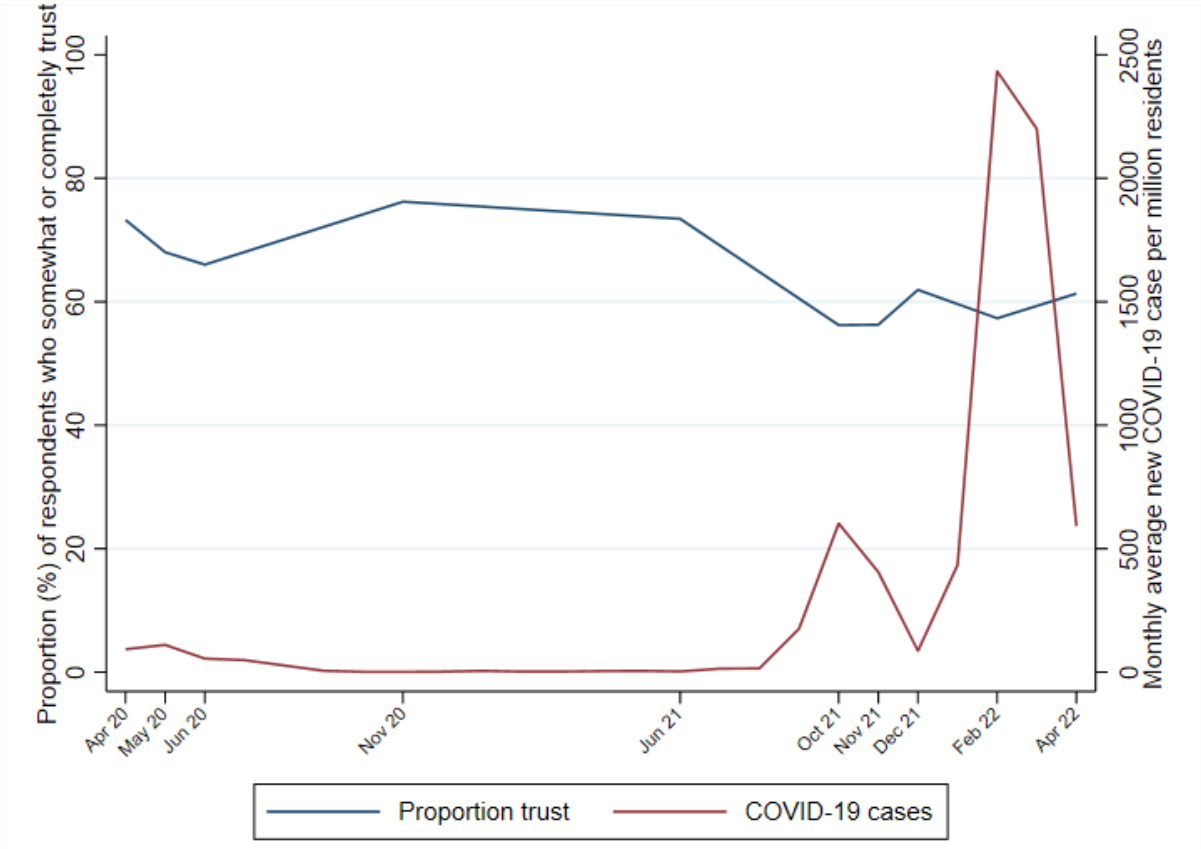

Figure 6: Longitudinal trend in trust in government from April 2020 to April 2022 against monthly average new COVID-19 cases per million residents.[4]

The proportion of respondents who somewhat or completely trust in the government's response to COVID-19 fell slightly from over 70% in April 2020 to approximately 67% in June 2020 following the Circuit Breaker, recovered to over 75% in November 2020, but

[4] Respondents were asked how much trust they have in the way the government is managing the COVID-19 situation, from 1 "do not trust at all" to 5 "trust completely". Proportion of respondents was derived by taking the total number of respondents who "trust somewhat" or "trust completely" over the total number of respondents who responded to this question for each month. This variable was fielded intermittently in the months that are indicated on the x-axis of Figure 6. Information on the number of COVID-19 cases per million residents was taken from https://ourworldindata.org/coronavirus/country/singapore.

experienced a minor decline again to its lowest levels (since April 2020 when this variable was tracked) in October 2021, after which it appears yet to have stabilized.

To preliminarily investigate which demographic groups experienced significant declines in their level of trust in the government's response to COVID-19, we conducted pair-wise t-tests to identify significant differences in the level of trust of individual demographic groups between November 2020 and November 2021. This test allows us to determine if there is a statistically significant difference in the levels of trust for individual groups between the two time points. Table 1 below presents the results of the pair-wise t-tests.

Table 1: *Results of pair-wise t-tests testing for significant differences in levels of trust between Nov 21 and Jun 22 for individual demographic groups*

Demographic Variable	Average trust in November 2020	Average trust in November 2021	Average change in trust score	Significance level of decline in trust*
Gender				
Male (n = 3141)	4.10	3.61	-0.49	p < 0.00
Female (n = 3460)	4.17	3.72	-0.46	p < 0.00
House type				
1-3 Room HDB (n = 1213)	4.07	3.68	-0.40	p < 0.00
4-5 Room HDB or EC (n = 3809)	4.14	3.65	-0.49	p < 0.00
Private property/apartment (n = 1100)	4.21	3.74	-0.50	p < 0.00
Education level				
Primary/None (n = 1463)	4.01	3.61	-0.39	p < 0.00
Secondary (n = 2712)	4.15	3.67	-0.48	p < 0.00
Post-Secondary without Tertiary (n = 1383)	4.17	3.65	-0.52	p < 0.00
Post-Secondary with Tertiary (n = 1027)	4.23	3.72	-0.51	p < 0.00
Race				
Chinese (n = 5843)	4.13	3.64	-0.49	p < 0.00
Malay (n = 334)	4.10	3.81	-0.29	p < 0.00
Indian (n = 304)	4.26	3.91	-0.35	p < 0.00
Others (n = 120)	4.12	3.73	-0.39	p < 0.00
Age				
57-61 (n = 1725)	4.08	3.64	-0.44	p < 0.00
62-66 (n = 2038)	4.14	3.65	-0.49	p < 0.00
67-71 (n = 1546)	4.14	3.65	-0.49	p < 0.00
72-77 (n = 1192)	4.19	3.73	-0.46	p < 0.00

**Significance of change was determined using a series of pair-wise t-tests, comparing the mean trust scores in November 2021 and June 2022 for each demographic group*

Results of the tests indicate that when stratified by demographic group, all groups experienced a significant decline in levels of trust from November 2020 to November 2021. We note that the largest decline in the average level of trust was -0.52 points for respondents with a post-secondary but no tertiary education. While statistically significant, this reflects a minor decline in the levels of trust of our respondents over the 1 year period as trust is measured on 5-point scale. Nevertheless, the finding that all social groups experienced declines preliminarily suggests that the decline in levels of trust was likely to have been driven by population-wide factors. For this reason, we hypothesize that a key factor shaping the levels of trust that respondents placed in the government may have been the number of COVID-19 cases occurring in Singapore. As was illustrated in Figure 6 above, the trend in the proportion of respondents who somewhat or completely trust in the government's response to COVID-19 appears to be negatively related to the monthly average new COVID-19 cases. This hypothesis is congruent with existing research that has found the perceived threat posed by COVID-19 to be associated with trust in government communication on COVID-19 (Lim et al. 2021).

Thus specifically, the decline in proportion of respondents who somewhat or completely trust in the government's response to COVID-19 from April to June 2020 is likely due to the increase in COVID-19 cases and the Circuit Breaker, with the number of COVID-19 cases peaking in May 2020. As the number of new cases remained relatively low in the months leading up to November 2020, levels of trust in the government recovered. Following that, a larger drop in the level of trust coincided with spikes in COVID-19 cases in September and October. During this time, there were also abrupt changes in restrictions from May to September 2021, whereby restrictions were tightened and relaxed back and forth. The observed fluctuations in trust are similar to what was found in a previous paper on COVID-19 in Singapore, where the proportion of respondents who were satisfied with the government's overall handling of COVID-19 was lowest in end-October 2020 (Mathews et al. 2021). As of April 2022, the proportion of respondents who trust in the government's response to COVID-19 remains low at slightly over 60% and has not yet return to previous levels of 70 to 75%.

In sum, it appears that various crucial aspects of older adults' lives, such as their well-being and involvement in activities, have not yet return to pre-COVID levels. Nonetheless, they appear to be on a positive trajectory, and will require further monitoring following the major relaxation of SMMs from end of April 2022 onwards, to determine if they will return to pre-COVID levels.

Safety and resumption of activities within the community

As discussed, activity levels have yet to return to pre-COVID levels despite most restrictions on social activities having been lifted. One potential reason for this could be that older adults may in fact still have lingering reservations about participating in social activities, despite

restrictions having been dialled back. To understand if this was the case, we sought to look at the subjective perceptions of our respondents on the safety of resuming particular activities in the endemic phase.

Likelihood of being able to treat COVID-19 as an endemic disease

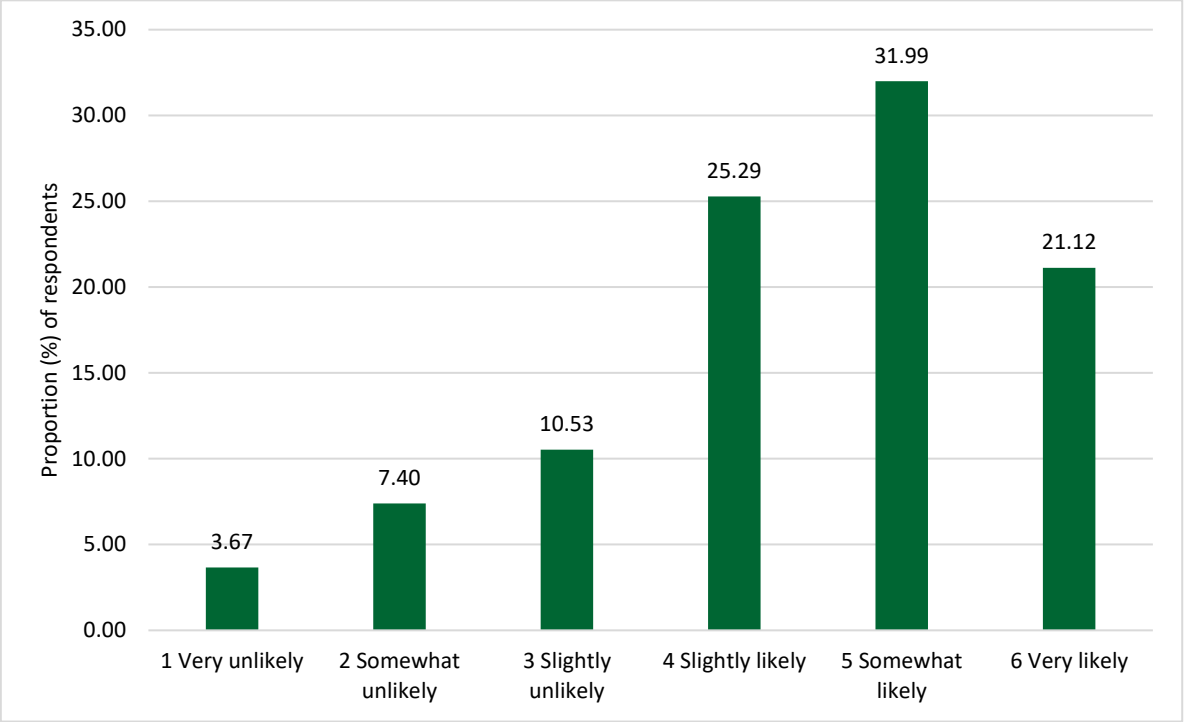

Figure 7: Likelihood of being able to treat COVID-19 as an endemic disease

We first looked at the confidence that respondents had in the feasibility of an endemic COVID-19. In January 2022, respondents were asked to rate how likely they felt it will be for Singapore to be able to treat COVID-19 as an endemic disease, taking into consideration the rise of the Omicron variant and the possibility of other new COVID-19 variants arising. The results revealed that older adults were generally optimistic about living with COVID-19 as endemic in Singapore, with close to 80% of respondents feeling that it is slightly likely, somewhat likely or very likely that Singapore will be able to treat COVID-19 as an endemic disease (see **Figure 7**).

Resuming activities

In March 2022, we also asked respondents to rate how confident they felt in resuming nine activities as we live with COVID-19 (see **Figure 8**). Participants were given the option to rate their level of confidence in each activity with the following four categories; “Not at all confident”, “Not very confident”, “Fairly confident”, and “Very confident”.

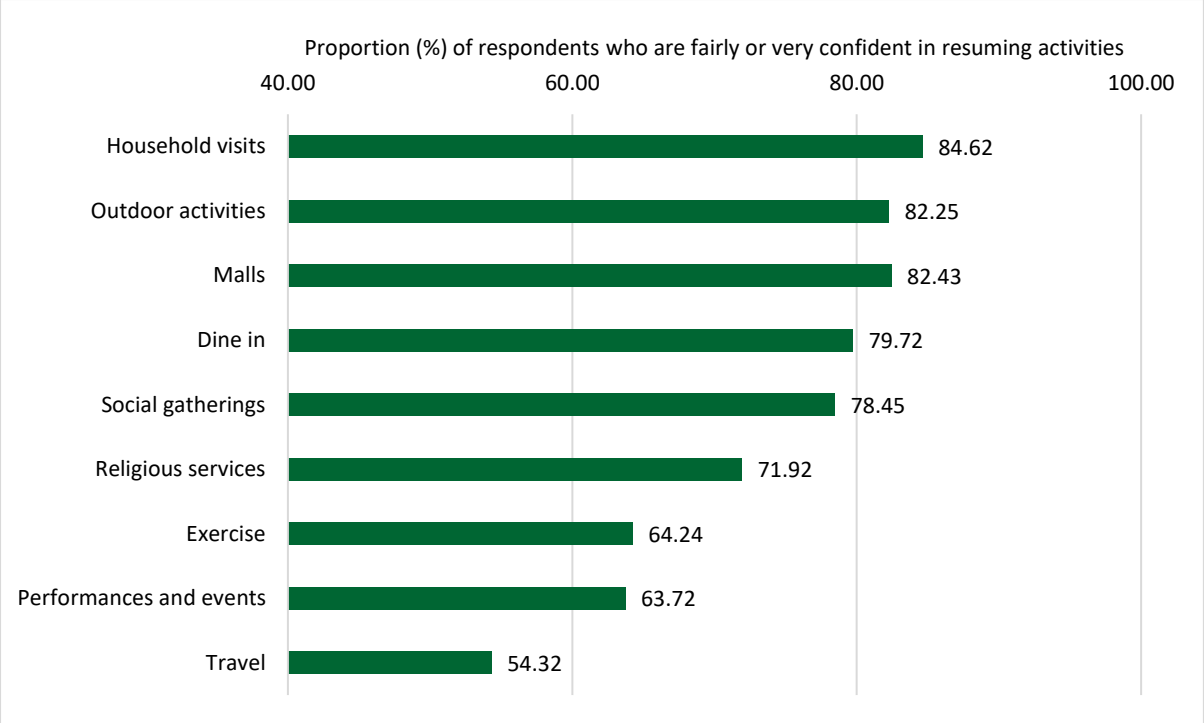

Figure 8: Proportion of respondents who are fairly or very confident in resuming activities

Approximately 80% or more of respondents were fairly or very confident in resuming household visits, outdoor activities, visiting shopping malls, and dining-in at F&B establishments. This suggests that older adults feel more confident resuming essential day-to-day activities that were not completely disrupted during COVID-19, as compared to other recreational activities that were almost completely halted such as performances and events and travel. Additionally, older adults appear to be less confident in resuming activities that involve large groups, such as performances and events, or activities with greater risk of exposure, such as exercising at gyms or fitness studios and travel.

To investigate if certain groups of older adults may feel less confident than others in resuming activities, we also calculated the average confidence in resuming activities scores for the 9 activities across several demographic variables for our respondents. This was calculated by assigning a numerical value to each of the four responses as listed above (e.g “Not at all confident” is given a value of 1, and “Very confident” is given a value of 4). The average across all 9 activities is then calculated with a higher score indicating that respondents are generally more confident in participating in activities, with respondents segmented by demographic group. The results are shown in Table 2 below.

Table 2: Demographic distribution of level of confidence in resuming activities

Variable	**Average Confidence in Resuming Activities Score (Min = 1, Max = 4)**	**P-value computed using Oneway ANOVA, testing for significant differences between groups (p < .05 is significant)**
Gender		
Male	3.04	p < 0.00
Female	2.93	
Race		
Chinese	2.96	p < 0.00
Malay	3.09	
Indian	3.10	
Other	3.18	
House type		
HDB 1-3 Room	2.93	p = 0.011
HDB 4-5 Room and Executive Condominium	2.99	
Private apartment/property	3.01	
Education		
Primary/None	2.91	p < 0.00
Secondary	2.97	
Post-Secondary without tertiary	3.01	
Post-Secondary with tertiary	3.06	
Age group		
56-60	3.06	p < .001
61- 65	3.00	
66-70	2.95	
71-75	2.89	
Trust in Government's response to COVID-19		
Do not trust at all	2.50	p < 0.00
Do not trust very much	2.74	
Neutral	2.92	
Trust somewhat	3.02	
Trust completely	3.11	

From the results we observe significant differences in the average confidence scores of our respondents across all variables tested. Based on the results of post-hoc Scheffe's test used to identify which specific groups had statistically different confidence scores (*see Tables A1-5 in the appendix for full results*), at a 95% confidence interval we find that (i) Women had lower levels of confidence relative to men, (ii) Chinese respondents had lower levels of confidence relative to respondents of other ethnicities, (iii) respondents living in 1-3 Room HDB flats had lower confidence levels relative to respondents living in private apartments/properties, (iv) respondents with primary or no education had lower levels of confidence relative to

respondents with a post-secondary education, (v) respondents in the youngest age group (57-61) had the highest confidence relative to respondents in the 67-71 age group and 72-76 age group, with respondents in the oldest age group (72-76) having the lowest confidence overall, and finally (vi) respondents who 'do not trust at all' or 'do not trust very much' in the government's response to COVID-19 had significantly lower levels of confidence relative to respondents displaying higher levels of trust in the government's response.

These findings generally reflect that respondents with lower socioeconomic status were more likely to feel less confident in resuming activities. This is congruent with existing research illustrating the greater impact that the pandemic has had on individuals with low socioeconomic status, attributed to their lack of access to key resources that would help them cope with the pandemic (Wanberg et al. 2020). Older individuals are also more vulnerable to severe COVID-19 infection (Chen et al. 2021) which may account for the finding that older respondents feel less confident in resuming activities compared to younger respondents. Finally, trust in the government has been shown to be an important factor shaping adherence to preventive health and prosocial behaviour during the pandemic (Han et al. 2021). In this case, it is likely that greater trust in the government would give respondents more assurances that it is indeed safe to resume activities as is claimed by the government, and hence more confidence in resuming activities.

Sense of safety from COVID when leaving the home with current SMMs

To further understand the factors that may be influencing the ability for older adults to resume 'normal' life after COVID-19, we were also interested in investigating if our respondents felt safe from COVID-19 leaving the home since COVID-19 is now seen as an endemic disease. As such, in April 2022, respondents were asked if they feel safe from COVID when they step out of their homes given all the SMMs in place. The overall distribution of responses is displayed below.

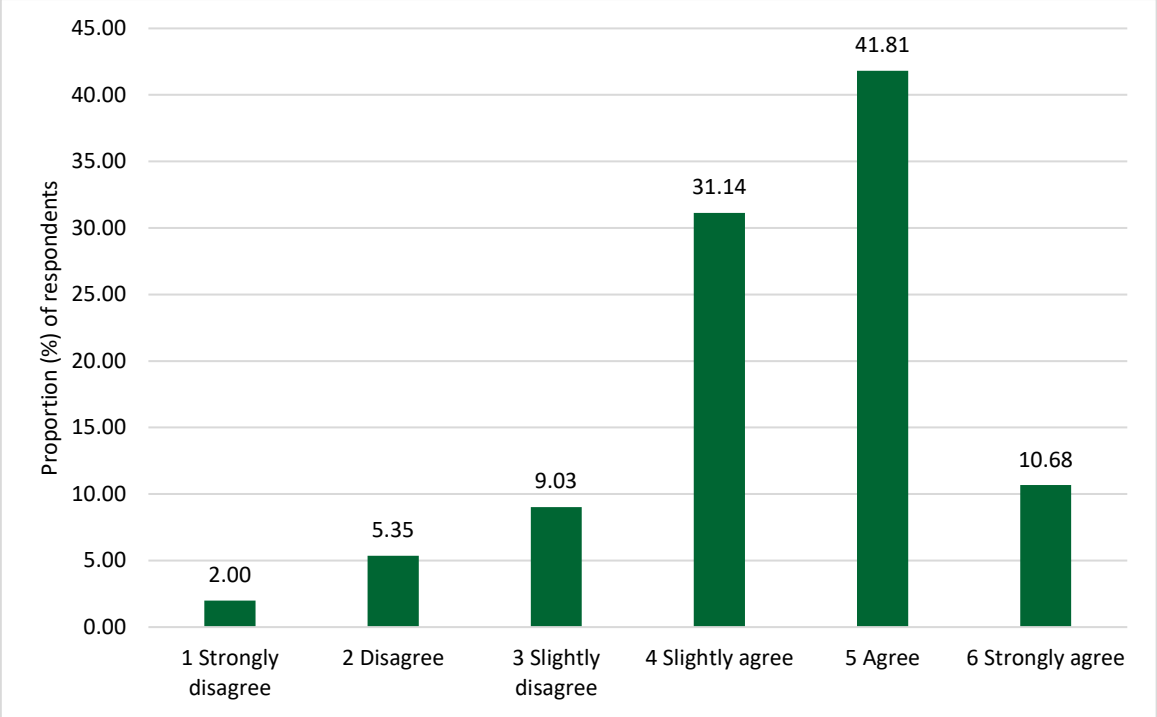

Figure 9: Respondents' sense of safety from COVID-19 when leaving the home given current SMMs

In April 2022, we found that more than 80% of respondents slightly agree, agree or strongly agree that they feel safe from COVID when they step out of their homes. Together with the above measures of the perceived likelihood of being able to treat COVID-19 as endemic in Singapore and their subjective confidence in resuming activities, it appears that the majority of respondents had a positive outlook towards the "new normal" and living with COVID-19 as endemic in Singapore.

However, there are still some who disagreed that they feel safe when leaving the home. To investigate who these respondents are, we subsequently calculated the proportions of respondents who disagreed that they felt safe across several demographic variables. The results are displayed in Table 3 below.

Table 3: Respondents who did not feel safe from COVID-19 when leaving home given current SMMs

Variable	**Proportion (%) who disagree***	**P-value computed using Kendall's Tau-b for ordinal variables and Cramer's V for nominal variables, testing for significant associations between variables (p < .05 is significant)**
Gender		Cramer's V = 0.0520, p = 0.004
Male (n = 3046)	15.76	
Female (n = 3367)	16.93	
Race		Cramer's V = 0.0564, p = 0.00
Chinese (n = 5657)	16.95	
Malay (n = 314)	9.24	
Indian (n = 322)	16.66	
Other (n = 111)	13.51	
House type		Kendall's Tau-b = 0.0337, p < 0.00
HDB 1-3 Room (n = 1216)	16.94	
HDB 4-5 Room and Executive Condominium (n = 3863)	16.31	
Private apartment/property (n = 1091)	15.22	
Education		Kendall's Tau-b = 0.0645, p < 0.00
Primary/None (n = 1397)	18.97	
Secondary (n = 2646)	15.72	
Post-Secondary without tertiary (n = 1340)	15.52	
Post-Secondary with tertiary (n = 1012)	15.81	
Age group		Kendall's Tau-b = -0.0203, p = 0.06
56-60 (n = 1707)	14.82	
61- 65 (n = 1990)	15.28	
66-70 (n = 1502)	18.11	
71-75 (n = 1118)	17.98	
Trust in Government's response to COVID-19		Kendall's Tau-b = 0.4737, p < 0.00
Do not trust at all (n = 128)	75.00	
Do not trust very much (n = 344)	56.40	
Neutral (n = 2007)	21.87	
Trust somewhat (n = 2324)	10.41	
Trust completely (n = 1610)	4.91	
Includes respondents who "Strongly disagree", "Disagree", or "Slightly disagree". Figures presented are **row proportions (i.e, proportion in each category that disagree – e.g 15.76% of men disagreed)*		

Similar to the distributions observed for the confidence that respondents had in participating in activities, we find associations between the extent to which respondents would agree that they feel safe leaving the house, and the demographic variables of gender, race, house type,

education, and levels of trust in the government. Particularly, we find that women, Chinese respondents, respondents living in small HDB flats, respondents who are less educated, and respondents who had lower trust in the government's response to COVID-19 were more likely to disagree that they feel safe from COVID-19 when leaving the house. However, we do note that all correlations were weak with a maximum Cramer's V value of 0.06 (for nominal variables) and Kendall's Tau-b value of 0.06 (for ordinal variables), except for the correlation between the level of trust and sense of safety with a Kendall's Tau-b value of 0.47 indicating a strong association. Correspondingly, we see the greatest difference in the proportion of respondents who disagree when comparing between respondents with low and high trust in the government's response to COVID-19. Although accounting for only a small percentage of the entire sample, 75% of respondents who "Do not trust at all" in the government's response disagreed that they felt safe from COVID-19 when leaving the home, compared to only 4.91% of respondents who "Trust completely" in the government's response.

Home Recovery Programme (HRP)

As a final aspect of understanding whether older adults have been able to cope with living with an endemic COVID-19, we also sought to understand whether our respondents faced difficulties in adhering to the HRP.

Ease of adherence to the HRP

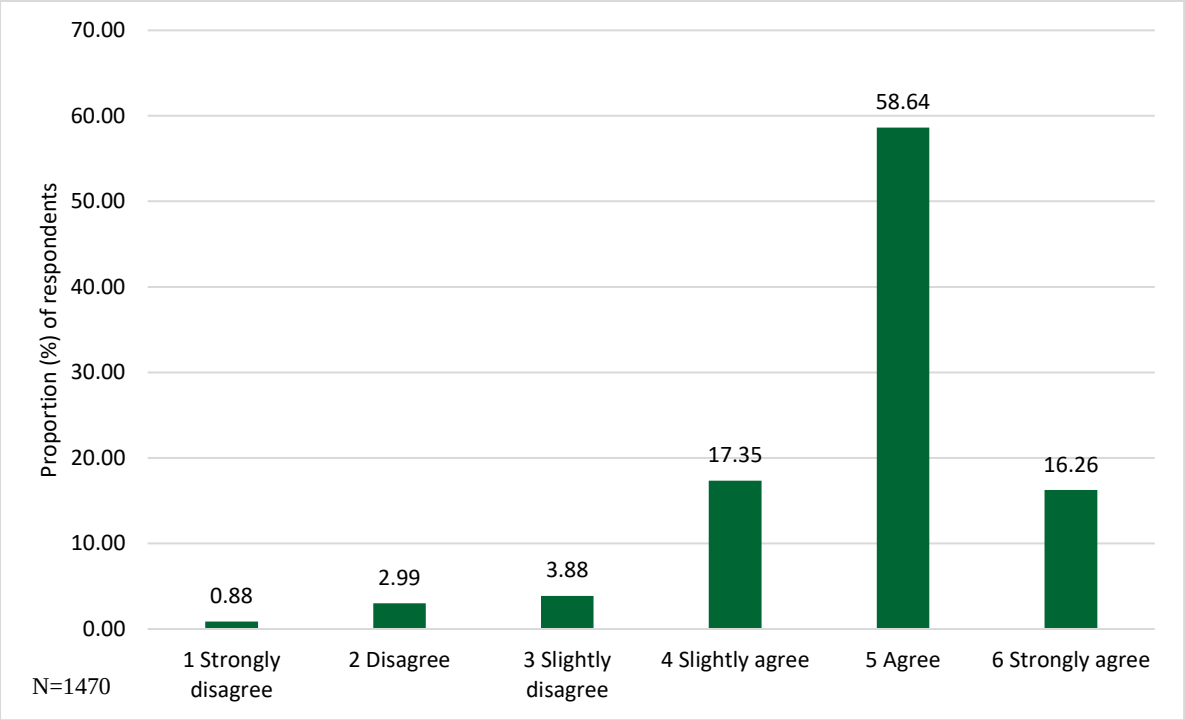

Figure 10: Respondents' ease of adherence to the HRP

Out of the 1470 respondents who had been on the COVID-19 HRP as of April 2022, over 90% of respondents slightly agree, agree, or strongly agree that it was easy to adhere to the HRP.

Only a small percentage of 7.8% of respondents disagreed to some extent that the HRP was difficult to adhere to. Thus, it appears that the HRP did not pose a significant challenge to most of the older adults who had been on the HRP.

Nonetheless, to further evaluate respondents who indicated difficulty in adhering to the HRP, we break down the demographics of respondents who disagreed that it was easy to adhere to the HRP in Table 4 below.

Table 4: Demographic breakdown of April 2022 subsample according to ease of adherence to COVID-19 home recovery programme. (N=1470)

Variable	**Proportion (%) who disagree***	**P-value computed using Kendall's Tau-b for ordinal variables and Cramer's V for nominal variables, testing for significant associations between variables (p < .05 is significant)**
Gender		Cramer's V = 0.0631, p = 0.321
Male (n = 688)	9.16	
Female (n = 782)	6.52	
Race		Cramer's V = 0.0784, p = 0.028
Chinese (n = 399)	7.55	
Malay (n = 476)	9.00	
Indian (n = 345)	10.00	
Other (n = 228)	0.00	
House type		Kendall's Tau-b = 0.0303, p = 0.21
HDB 1-3 Room (n = 273)	9.89	
HDB 4-5 Room and Executive Condominium (n = 901)	7.44	
Private apartment/property (n = 215)	6.05	
Education		Kendall's Tau-b = 0.0745, p < 0.00
Primary/None (n = 355)	9.86	
Secondary (n = 648)	8.18	
Post-Secondary without tertiary (n = 284)	5.99	
Post-Secondary with tertiary (n = 183)	4.92	
Age group		Kendall's Tau-b = 0.0017, p = 0.94
56-60 (n = 1284)	7.52	
61- 65 (n = 100)	6.51	
66-70 (n = 70)	8.41	
71-75 (n = 13)	10.09	
Includes respondents who "Strongly disagree", "Disagree", or "Slightly disagree". Figures presented are **row proportions (i.e, proportion in each category that disagree e.g 9.16% of men disagreed.*		

Results illustrate that in terms of the levels of difficulty faced in adhering to the HRP, significant associations were only found between the ease of adherence, and the demographics variables of race and the level of education respondents, although again the strength of association between the variables are weak with a Cramer's V value of 0.08 and a Kendall's Tau-b value of 0.07 respectively. Particularly, respondents with lower levels of educational attainment and who were Indian were more likely to have faced difficulties. Further research is required to investigate why this may be so, but this may possibly be due to the fact that levels of educational attainment are closely associated with socio-economic status in Singapore. Older adults of lower socio-economic status may face greater difficulties adhering to the HRP due to their greater work commitments which may make taking extended breaks to care for family members on HRP more challenging.

Difficulties faced during the HRP

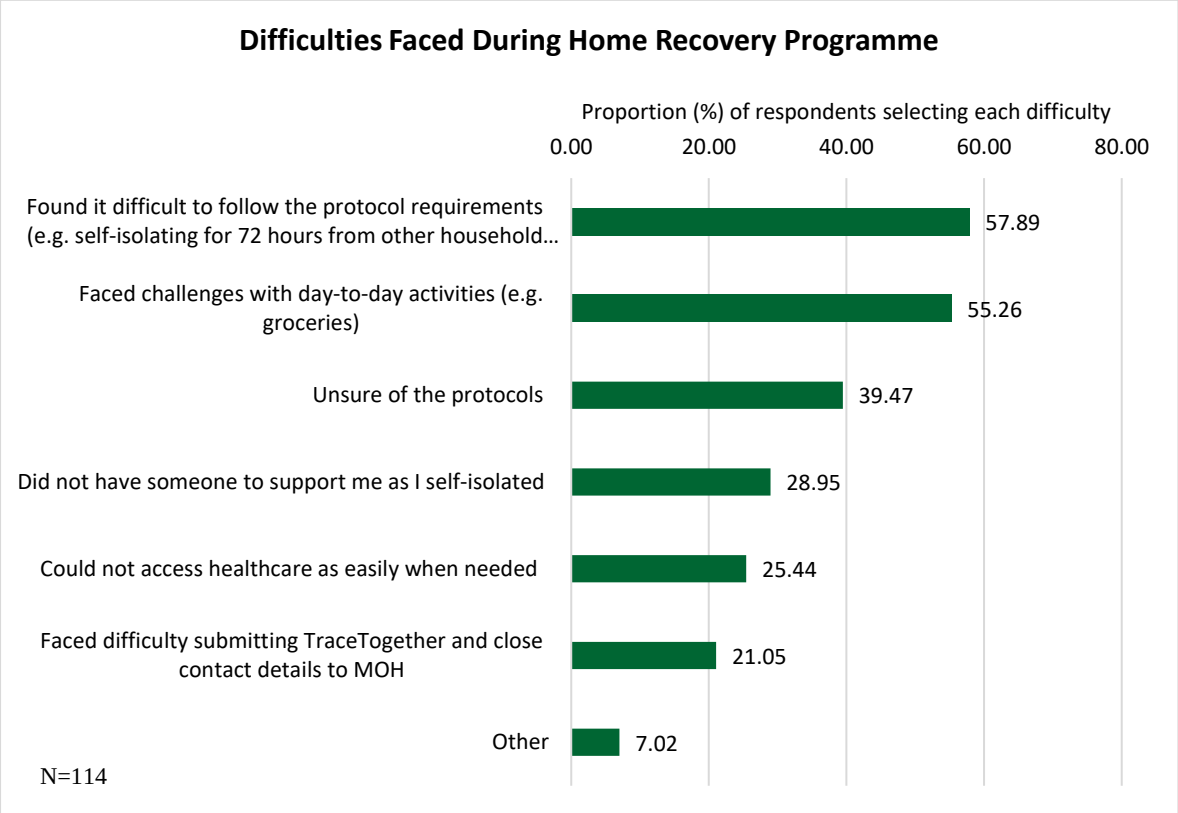

Figure 11: Difficulties faced by respondents who found it difficult to adhere to the HRP. Figures represent the proportion of respondents that selected each difficulty. As respondents were allowed to select more than one difficulty, figures will not add up to 100%.

Out of the 114 respondents who strongly disagree, disagree or slightly disagree that the HRP was easy to adhere to, the top three difficulties that respondents faced in adhering to the HRP were that it was difficult to follow protocol requirements such as isolating (57.89% selected this option), that they found it difficult to carry out their day-to-day activities (55.26% selected this option), and that they were unsure of the necessary protocols involved in the HRP (39.47% selected this option).

Discussion and recommendations

The results of this study indicate that by and large, while our respondents have been able to resume most activities and their overall life satisfaction has almost returned to pre-COVID levels, there are still certain factors preventing respondents from fully returning to a 'pre-COVID' way of life. In particular, we find that while most respondents feel confident resuming certain activities and feel safe from COVID-19 when leaving the house, there are still some that remain apprehensive of the prospect of resuming normal life. As the results indicate, this is especially the case when considering activities that were put on hold during the pandemic and that involve large groups.

Certain groups of respondents are also identified as more likely to feel unprepared to resume normal life. We find that older and less educated respondents were generally more likely to be apprehensive towards resuming activities, both in terms of feeling less confident about resuming activities and in terms of being less likely to agree that they feel safe from COVID-19 when leaving the house. Most significantly, however, we find that respondents with lower trust in the government's response to COVID-19 were most likely to be apprehensive towards resuming activities.

In terms of adherence to the HRP, we find that a large majority of respondents agreed (slightly agreed, agreed, or strongly agreed) that it was easy to adhere to the HRP. However, respondents who disagreed that it was easy to adhere to the HRP were found to be less educated. The two most cited reasons for not finding it easy to adhere were difficulties following protocol requirements (such as isolating from other household members) and carrying out day-to-day activities.

Based on these findings and with the aim of supporting older adults to 'resume' normal life in the endemic phase, we therefore make the following recommendations;

1. Greater assurances should be provided to older adults about the safety of the resumption of activities, especially for older adults greater in age, and who are less educated. This is likely to be important in ensuring that more older adults feel confident and safe in 'resuming' normal life and learn to live with an endemic COVID-19. Alternatively, more guidance on the steps that older adults can take to protect themselves from COVID-19 while participating in activities may also help to assure them of the safety of participating in activities in the endemic phase.

2. As was similarly found in our previous research, the level of trust that respondents have in the government's response to COVID-19 is found to be an important factor shaping the confidence that respondents have in participating in activities in the endemic phase, as well as how safe they feel from COVID-19 when leaving the house.

This could possibly be a result of respondents not trusting the efficacy of the various measures that the government has implemented to contain and prevent the spread of COVID-19 in an endemic COVID-19. More effort should thus be made to build older adults' trust in the government's response in addition to enhancing the safety of living with endemic COVID-19.

3. Finally, in terms of adherence to the HRP, we find that less educated respondents were more likely to find it difficult to adhere to the HRP. Further research is needed to uncover exactly why such respondents find it more difficult to adhere, but in general this suggests that greater support should be provided to such respondents to help them adhere to the HRP.

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Appendix

Table A1: Results of Scheffe's test for homogenous subsets between race and confidence scores

Scheffe[a, b]

Race	N	Subset for alpha = 0.05 1	2
Chinese	5702	2.964	
Malay	351	3.0874	3.0874
Indian	338	3.0963	3.0963
Other	118		3.1759
Sig.		0.183	0.538

Means for groups in homogenous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 276.672
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A2: Results of Scheffe's test for homogenous subsets between housing type and confidence scores

Scheffe[a, b]

Age group	N	Subset for alpha = 0.05 1	2
HDB 1 - 3 Room	1157	2.9301	
HDB 4 - 5 and Executive Condo	1505	2.9907	2.9907
Private apartment/condominium/landed property	2018		3.0069
Sig.		0.540	0.812

Means for groups in homogenous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 276.672
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A3: Results of Scheffe's test for homogenous subsets between education and confidence scores

Scheffe[a, b]

		Subset for alpha = 0.05		
Education	N	1	2	3
Primary/None	1439	2.9143		
Secondary	2674	2.9716	2.9716	
Post-secondary without University	1357		3.0104	3.0104
Post-secondary with University	1030			3.0602
Sig.		0.191	0.538	0.310

Means for groups in homogenous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 276.672
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A4: Results of Scheffe's test for homogenous subsets between age group and confidence scores

Scheffe[a, b]

		Subset for alpha = 0.05		
Age group	N	1	2	3
72-76	1157	2.8901		
67-71	1505	2.9496	2.9496	
62-66	2018		2.9986	2.9986
57-61	1738			3.0592
Sig.		0.139	0.292	0.127

Means for groups in homogenous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 276.672
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table A5: Results of Scheffe's test for homogenous subsets between trust in government and confidence scores

Scheffe[a, b]

		Subset for alpha = 0.05			
Trust in Government's Response to COVID-19	N	1	2	3	4
Do not trust at all	163	2.5007			
Do not trust very much	394		2.7354		
Neutral	2041			2.9186	
Trust somewhat	2024			3.0245	3.0245
Trust completely	1580				3.1117
Sig.		1.000	1.000	0.228	0.430

Means for groups in homogenous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 276.672
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Research Team

1. Rachel Ngu

Research Assistant, Centre for Research on Successful Ageing (ROSA)

2. Micah Tan

Research Associate, Centre for Research on Successful Ageing (ROSA)

3. Low Jia Ying

Research Assistant, Centre for Research on Successful Ageing (ROSA)

Please contact the ROSA team at rosa@smu.edu.sg for any questions or queries regarding this report.

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 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.

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