

Centre for Research on Successful Ageing

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THE SOCIAL WELL-BEING OF OLDER ADULTS IN SINGAPORE

## Summary of Key Findings

- Respondents had an average Social Well-being score of 61.75 out of 90, and tended to score highest for Social Actualization (belief in the progress of society), and lowest for Social Coherence (the belief in their ability to understand society) on average.
- 2. Education and house type were found to be significant factors shaping the social well-being of respondents, with respondents with higher educational attainment and living in wealthier house types being more likely to have higher social well-being.
- 3. The availability of neighborhood amenities is found to be associated with higher social wellbeing scores. The greatest difference in social well-being score is found when comparing between respondents with and without parks, greenspaces, or exercise spaces within a 10minute walk from their home. This suggests that such spaces may have the strongest effect on the social well-being of older adults.
- 4. In terms of the effect of the participation in social activities on social well-being, we find that greater frequencies of participating in social activities are associated with higher social well-being scores, suggesting that participating in social activities has a positive effect on social well-being.
- 5. Finally, we also find that social well-being and its constitutive components are positively associated with mental well-being among our respondents, with Social Integration (feeling like a part of society or a community) (r = 0.42) appearing to have the strongest effect. This suggests that helping older adults feel more integrated into their communities may have the largest implications for the social well-being of Singaporeans.
- 6. In terms of recommendations, we suggest the following:
  - a. Further research should be conducted to uncover the differential effects that the availability of specific neighborhood amenities can have on the social well-being of older adults. The current descriptive results preliminary suggest that different amenities shape social well-being to different extents. However, we note that the present data are correlational and that these trends will thus require further investigation. This further research will likely be valuable for policy formation as by identifying the types of amenities that are most likely to contribute to social well-being.
  - b. Increasing middle-aged and older adult participation in social activities may be a key means by which social and mental well-being can be improved, and efforts to keep older adults engaged in such activities should be expanded.

### Introduction

The concept of social well-being has been of interest especially when studying older adult well-being given that problems of social isolation and loneliness are more prevalent and have greater consequences for older adults (Waite 2018). However, much is still to be understood about the social well-being of older adults with most research being conducted on social predictors of health, rather than on social well-being as a specific "component of health" (Waite 2018:100). As such, the current research brief provides a preliminary examination of social well-being among middle-aged and older adults in Singapore based on Keyes' social well-being framework (Keyes 1998). Using the Singapore Life Panel<sup>®</sup> (SLP), a localized version of Keyes' instrument to measure social well-being was fielded. The current research brief offers preliminary results based on this instrument, including descriptive statistics of responses to the survey, as well as associations with other key factors including mental well-being, the frequency of participation in social activities, and the availability of neighborhood amenities.

In terms of the organization of this paper, we first provide some brief background on the concept of social well-being and the instrument that was used to measure social well-being and fielded to the SLP. Subsequently, the findings will be presented in three main parts; the first presents descriptive frequencies of responses to the questions, as well as demographic distributions of responses. The second part presents correlations between several key social factors and social well-being, including the participation in social activities and the availability of neighborhood amenities. The final, third part examines how social well-being is correlated to mental well-being among middle-aged and older adults in Singapore. The brief then concludes with a short discussion of several implications of our findings.

### Keyes' Social Well-being Framework and Instrument

Among the various frameworks and measures of social well-being that have been developed, Keyes' (1998) framework of social well-being is the most widely cited. According to Keyes, social well-being consists of 5 primary components: social coherence, social actualization, social integration, social contribution, and social acceptance. The diagram below provides a brief description of each component of social well-being as defined by Keyes.



Figure 1: Keyes' Social Well-being Framework

In addition to his framework of social well-being, Keyes also developed a survey instrument to measure social well-being based on his theoretical framework which we use in our study (Keyes and Shapiro 2004). However, while the instrument was validated and fielded in the context of the United States, the measure has yet to be explored comprehensively within other contexts. As such, based on feedback from a pilot study that we conducted on the contextual and cultural suitability of the measure within the Singapore context, some adjustments were made to the questions before they were fielded to the SLP. The full instrument that was fielded, as well as the original versions of the questions, are provided in the table below.

Component	Original	Fielded
Social Actualization	The world is becoming a better place for everyone.	Overall, Singapore is becoming a better place to live for people like me.
	Society has stopped making progress. (-)	Singapore has stopped making progress as a whole. (-)
	Society isn't improved for people like me. (-)	In general, Singapore is continually improving.
Social Acceptance	People who do a favour expect nothing in return.	I believe that people in Singapore are willing to help each other out.
	People do not care about other people's problems. (-)	I think that people in Singapore are considerate of others.
	I believe that people are kind.	When I go out, people are kind to me.
Social Coherence	The world is too complex for me. (-)	I understand how Singapore society works.
	I cannot make sense of what's going on in the world. (-)	l cannot make sense of what is going on in Singapore. (-)
		I find it easy to predict what will happen next in Singapore.
Social Contribution	I have something valuable to give to the world.	I have nothing important to contribute to Singapore. (-)
	My daily activities do not create anything worthwhile for my community.	I play a meaningful role in our society.
	I have nothing important to contribute to society. (-)	I am a valued member of our society.
Social Integration	I don't feel I belong to anything I'd call a community. (-)	I don't feel like I belong to a community. (-)
	I feel close to other people in my community.	I feel close to members of my community.
	My community is a source of comfort.	My community is a source of comfort.

#### Figure 2: Specific items fielded as part of the Social Well-being instrument

Note: (-) indicates that the item is reverse coded.

The final social well-being instrument that was fielded to the SLP thus consisted of 15 items, and respondents answered on a 6-point likert scale ranging from '*Strongly Disagree*' to '*Strongly Agree*'. To derive an overall social well-being score, numerical values ranging from 1-6 were assigned to each response and the 15 items were then summed. The eventual social well-being variable thus has a

minimum score of 15 and a maximum score of 90 with a higher score reflecting a higher level of social well-being .

## The Singapore Life Panel® (SLP)

The SLP is a nationally representative monthly panel survey of middle-aged and older adults in Singapore. The SLP began with a sample of Singaporeans aged between 50 and 70 years of age in 2015. This brief references data collected in May 2022, at which point respondents were between the ages of 58 to 78 (inclusive). A total of 6,689 respondents within this age range participated that month.

### Findings

Descriptive Statistics on Social Well-being Measures and Demographic Distribution of Responses



Figure 3: Overall distribution of Social Well-being scores for respondents

Figure 4: Average score for each component of Social Well-being across the entire sample



Overall, we find that respondents had an average social well-being score of 61.8 (minimum = 15, maximum = 90). When broken down into the individual components of social well-being, we find that there were some slight differences in the scores that respondents had on average for each component

of social well-being. We find specifically that respondents tended to score the highest for Social Actualization, referring to the belief in the continued progress of Singaporean society, with an average score of 13.0 (minimum 3, maximum 18), while also tending to score the lowest for Social Coherence, referring to the ability for individuals to make sense of Singapore society, with an average score of 11.7. While the differences in scores are small, this preliminarily suggests that on average, respondents feel confident about Singapore's progress as a society, but at the same time are less likely to feel as though they are able to fully comprehend the changes that are taking place around them.

Demographic Group	Mean	Significance of Oneway-ANOVA	
		Comparison of Means Test (p-value)	
Age Group <sup>1</sup>			
57-61	61.57		
62-66	61.41	n = 0.72	
67-71	61.93	p = 0.73	
72-77	61.84		
Race			
Chinese	61.61		
Malay	63.61	$n < 01^2$	
Indian	62.10	p<.01	
Other	62.47		
Education			
Primary/None	59.79		
Secondary	61.92	n < 001	
Post-Secondary without Tertiary	62.27	100. > q	
Post-Secondary with Tertiary	63.38		
House type			
HDB 1-3 Room	61.21		
HDB 4-5 Room and EC	61.99	p < .001	
Private Property	63.24		
Gender			
Male	61.57	n - 0 17	
Female	61.90	p = 0.17	
Living Arrangement			
Lives alone	61.80	n - 0 12	
Lives with others	61.14	p = 0.12	

Figure 5: Demographic distribution of Social Well-being Scores

A further breakdown of social well-being scores by demographic group using Oneway-ANOVA tests and post-hoc Scheffe's tests for homogeneous subsets showed that at 95% confidence, both education and housing type are differentiators of the levels of social well-being (results of the post-hoc Scheffe's tests are presented in Figures A1 and A2 in <u>the appendix</u>). Those who are more educated

<sup>&</sup>lt;sup>1</sup> A Pearson's Correlation Coefficient test was also conducted to investigate associations between age and social well-being. While age was found to significantly positively correlated with social well-being (p = 0.01), we note that the correlation was found to be very weak (r = 0.01). As such, congruent with the results of the Oneway ANOVA tests, we do not find that age is a significant factor shaping social well-being.

<sup>&</sup>lt;sup>2</sup> While differences are observed in the average social well-being scores of Chinese and Malay respondents, further tests for homogenous subsets did not reveal statistically significant differences across racial groups. Differences between Chinese and Malay respondents were also found to be small. As such, race is not identified as significant factor shaping social well-being.

are more likely to have better social well-being, with university graduates having the strongest social well-being and those with primary school education reporting the lowest social well-being. We posit that this very likely reflects the social resources that formal education accords, including the induction into quality social networks that enhance the social capital of members.

Housing is a proxy for social economic status, and the results support the hypothesis that those who are better off are more likely to enjoy strong social well-being. Those in private homes report higher social well-being compared to those in smaller 1-3 room HDB homes. Being able to identify where seniors with lower social well-being may be clustered is very useful as it allows us to curate targeted programs to support the social well-being of seniors living in 1-3 room HDB flats.

In sum, these results preliminarily suggest that the socioeconomic status (SES) of middle-aged and older adults in Singapore may play an important role in shaping social well-being. We find that respondents with higher SES (higher education and bigger housing type) are likely to have higher levels of social well-being as compared to those with lower SES.

## Associations between social well-being and the availability of neighborhood amenities

Past research has demonstrated that the availability of neighborhood amenities can have an effect on both the well-being of individuals living within the neighborhood, for instance in terms of increasing feelings of belonging to the community (Plane and Klodawsky 2013), or in terms of improving outcomes such as mental health status (Ellaway and Macintyre 1998). Given this, we sought to understand how the availability of neighborhood amenities may be correlated with levels of social well-being among our respondents. To do this, we compared the average overall social well-being scores of respondents who had neighborhood amenities available to them within a 10-minute walk to the average social well-being scores of respondents who did not have the amenities available to them within a 10-minute walk. The results are presented in the figure below.



Figure 6: Mean social well-being score based on the availability of neighbourhood amenities within 10-minutes walk from respondents' houses

The results illustrate that respondents with neighborhood amenities available to them within a 10minute walk had higher levels of social well-being compared to respondents without such amenities available to them<sup>3</sup>. We also find that the greatest difference in average social well-being was observed between respondents with no park, greenspace, or exercise space within a 10-minute walk of their house, and those who had such amenities available to them. This is congruent with existing research that found that having a park or greenspace near to one's home increased feelings of belonging to a community as it provided a space for interactions between neighbors and members of the community to take place (Plane and Klodawsky 2013). It is possible that such effects are similarly being observed here, and may indicate the importance of parks, greenspaces, or exercise spaces for providing older adults with an opportunity to interact with other members of the community. Overall, while further research is necessary to uncover the precise effects of having each amenity available within close proximity to an older adult's home on their social well-being, these results provide preliminary evidence that having more amenities available can have a positive impact on the social well-being of older adults in Singapore.

### Associations between the frequency of participation in social activities and social well-being

In addition to the neighborhood environment, the frequency of participating in social activities has been shown to be another important predictor of well-being among older adults (Huxhold, Miche, and Schüz 2014). We thus also endeavored to examine how social well-being scores are associated with the frequency of participating in a range of different social activities. This was done by plotting the average social well-being scores of respondents based on the frequency with which they participated

<sup>&</sup>lt;sup>3</sup> *T*-tests were conducted to compare the mean scores of both groups for all amenities, and all differences were found to be significant.

75 70 Acerage Social Well-being Score 65 60 55 50 Less than once a 1-3 times a month Several times per week Daily Once a week month/never Visiting friends or family —— Religious activities Group activities Physical activities Spending time outdoors Hobbies Volunteering Digital contact

in each social activity, ranging from "Less than once a month/never" to "Daily". The results are presented in the figure below.

Figure 7: Mean social well-being score based on levels of frequency of participation in social activities

# Associations between social well-being and mental well-being (depression indicators)

of daily.

Finally, given ROSA's objective of studying well-being as a multi-dimensional construct, we sought to examine the associations between social well-being and its constitutive components, and mental wellbeing measured using the CESD depression scale with a higher score reflecting fewer depressive symptoms and hence better mental well-being. The figures below are scatter plots illustrating the correlations between social well-being and its components, and mental well-being, with the Pearson's correlation coefficient (r) presented as well. A larger coefficient value indicates that the association

The results suggest that social well-being significantly increases<sup>4</sup> with greater frequencies of participation in social activities across all activities. Interestingly, we see that the biggest difference in social well-being is observed when comparing between respondents with low frequency of digital contact with others, and respondents with high (at least several times a week) frequency of digital contact. This preliminary suggests that keeping older adults digitally connected may serve as a potential key point of intervention when considering ways in which to improve the social well-being of older adults—although it is not clear why social well-being peaks at several times per week instead

<sup>&</sup>lt;sup>4</sup> A Pearson correlation coefficient test was conducted to examine the significance of the association between social well-being and the frequency of participating in each activity using numerical values assigned to each frequency – i.e "Less than once a month/never" = 1, "Daily" = 5.

between the two variables is stronger. All correlations were found to be statistically significant (p < .05).



Figure 8: Correlations between social well-being and mental well-being<sup>5</sup>

The results indicate positive correlations between mental well-being and social well-being, as well as its components. Particularly, we see that as social well-being improves, mental well-being scores improve. Additionally, we observe that among components of social well-being, social integration appears to have the strongest correlation with mental well-being with a Pearson's correlation

<sup>&</sup>lt;sup>5</sup> Given the large sample size of our study, the scatter plots presented here do not plot the exact responses of every respondent as this would result in an overpopulated scatterplot. Instead, these scatter plots plot the average mental well-being score of respondents at each level of the x-variable (e.g the mean mental well-being scores of respondents with a social well-being score of 15, 16, 17, and so on.). This allows us to present the results succinctly and to identify aggregate level trends more easily.

coefficient of 0.42. This preliminarily suggests that whether older adults feel like they are part of or belong to a community may be the strongest predictor of mental well-being, and thus that efforts to help older adults feel like they are part of a community may be the most effective point of social intervention for efforts to improve the mental well-being of older adults in Singapore.

## Discussion and Policy Recommendations

To summarize, this research brief makes several preliminary contributions regarding the distribution of social well-being in Singapore, the factors that influence social well-being, as well as the importance of social well-being for mental well-being among middle-aged and older adults. We find firstly that in general, respondents tended to score highest for social actualization, and lowest for social coherence. Social well-being scores were also found to be demographically distributed along the lines of SES, with those with a higher SES having higher levels of social well-being.

In addition, we find that the availability of amenities as well as the participation in social activities was significantly positively associated with social well-being. Interestingly, we find preliminary descriptive evidence that digital contact with others was the strongest predictor of social well-being among the social activities. We also find that while the presence of parks and green spaces was most strongly associated with social well-being.

Finally, we find that social well-being is a strong predictor of mental well-being. Among the specific components of social well-being, social integration appears to have the strongest effect on mental well-being.

In general, the findings presented in this research brief shed light on the usefulness of the concept of social well-being for understanding and improving the well-being of middle-aged and older adults in Singapore. While further research is needed to elaborate on the preliminary findings presented here, this research potentially identifies several pathways through which the social environment can shape well-being among middle-aged and older adults. Specifically, we find that the availability of neighborhood amenities within a 10-minute walk from one's house, as well as participating in social activities, can have a positive impact on the social well-being of middle-aged and older adults which in turn has positive effects on their mental well-being. Social well-being thus serves as a potential pathway through which the social environment can shape the well-being of middle-aged and older adults, and thus as a potential site of intervention for policymakers to address in efforts to improve subjective well-being and enable successful ageing in Singapore.

Based on the findings, we also make two preliminary points for consideration for furthering policy efforts to increase mental and social well-being among middle-aged and older adults;

- 1. Further research should be conducted to uncover the differential effects that the availability of specific neighborhood amenities can have on the social well-being of older adults. The current descriptive results preliminary suggest that different amenities shape social well-being to different extents. However, we note that the present data are correlational and that these trends will thus require further investigation. This further research will likely be valuable for policy formation as by identifying the types of amenities that are most likely to contribute to social well-being, policymakers can be better informed in terms of knowing what kinds of neighborhood resources they should be providing for older adults in order to support their well-being.
- 2. Increasing middle-aged and older adult participation in social activities may be a key means by which social and mental well-being can be improved. Interestingly, however, increasing the

digital contact that middle-aged and older adults have with others appears to be particularly strong in effect<sup>6</sup>. Efforts to increase the digital literacy of middle-aged and older adults should continue to be explored given the potential effect this can have on the social and mental wellbeing of older adults.

In sum, our initial investigation into the social well-being of middle-aged and older adults reveals that there is much potential in further exploring the concept, especially in terms of providing policy insights into the specific efforts that should be adopted and implemented in order to improve various aspects of social and mental well-being among middle-aged and older adults in Singapore. Future studies on social well-being should thus focus on identifying the different infrastructural and social resources that middle-aged and older adults rely on for their social well-being, as well as uncovering why these resources help to improve social well-being.

<sup>&</sup>lt;sup>6</sup> We note that this may not be apparent based on the findings presented in this report, as respondents who had digital contact on a daily basis did not have the highest social well-being scores. However, we have nevertheless chosen to highlight digital contact as an important factor shaping social well-being based on subsequent analysis that we have conducted to examine the effect of social activities on social well-being. Preliminary multivariate regression modelling has shown that digital contact has the strongest effect on social well-being.

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### Appendix

Figure A1: Results of post-hoc Scheffe's test for homogenous subsets, examining **education level** as a factor influencing social well-being

Homogeneous Subsets							
Social Well-being							
ochelle	Subset for alpha = 0.05						
Education	N	1	2	3			
1 Primary/none	1472	59.79					
2 Secondary	2712		61.92				
3 Post-sec without University	1366		62.27				
4 Post-sec with University	1032			63.38			
Sig.		1.000	.808	1.000			
Means for groups in homogeneous subsets are displayed.							
a. Uses Harmonic Mean Sample Size = 1455.003.							
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.							

Figure A2: Results of post-hoc Scheffe's test for homogenous subsets, examining **housing type** as a factor influencing social well-being

Homogeneous Subsets							
Social Well-being							
	Subset for alpha = 0.05						
housetype_p	N	1	2	3			
1 HDB 1 - 3 Room	1245	60.21					
2 HDB 4 - 5 and Exective Condo	3847		61.99				
3 Private apartment/condominium/la nded property	1080			63.24			
Sig.		1.000	1.000	1.000			
Means for groups in homogeneous subsets are displayed.							
a. Uses Harmonic Mean Sample Size = 1508.234.							
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.							

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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 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.

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