RESEARCH ARTICLE

Successful Ageing: Perception of Older Adults in Otago, New Zealand

Nurrul Johari 1, Charlotte Mentzel 1, Yoram Barak 1

¹ Department of Psychological Medicine, Dunedin School of Medicine, Otago University, New Zealand.



PUBLISHED

28 February 2025

CITATION

Johari, N., Mentzel, C., et al., 2025. Successful Ageing: Perception of Older Adults in Otago, New Zealand. Medical Research Archives, [online] 13(2).

https://doi.org/10.18103/mra.v13i2.6278

COPYRIGHT

© 2025 European Society of Medicine. This is an open- access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

DOI

https://doi.org/10.18103/mra.v13i2.6278

ISSN

2375-1924

ABSTRACT

Background: Older adults' concepts of successful ageing are important in planning health promotion. We surveyed the perceptions of successful ageing in New Zealand.

Methods: A 20-item survey was given to community-dwelling older adults attending a series of public lectures on aging.

Results: 536 New Zealand participants aged 65 years and older (mean age 75 + 6.28 years) returned completed surveys. Fifteen attributes were considered important by over 75% of participants. The attribute that most people thought was important for successful ageing was "remaining in good health until death" (98%). "Living a very long time" was the attribute of lowest importance (25%). There were significant differences between the percentages males and females deemed important in successful ageing in 11 of the 20 attributes (p<0.005), with more females rating importance of social involvement, adjustment in old age and having a sense of peace. Conclusion: Our results show similarities in older adults' perceptions of successful ageing with other European populations and indicates some gender differences. Further studies would need to include other ethnicities and qualitative components. Policy makers and stakeholders need to focus on supporting social engagement as one variable that will potentially affect successful ageing.

Keywords: Successful ageing; healthy ageing; ageing well.

Introduction

The ageing population is estimated to reach 1.5 billion people worldwide in the next three decades ¹ and by 2050s, there could be up to one quarter of the New Zealand population aged 65 years or older ². There has been increasing interest in how to promote healthier old age amid escalating health and social care costs. There is a diverse range of terms used to conceptualise, define, and measure healthy ageing concepts including gerotranscendence, successful ageing, active ageing, productive ageing and resilient ageing ³. This study will focus on the term successful ageing.

Successful ageing was first introduced in scientific literature in the 1950s 4,5 but the term was popularised by Rowe & Kahn 6 who recognised the heterogeneity of ageing and not simply dividing older adults into those with and without disease or disability. Rowe & Kahn 6 differentiated between 'usual ageing' whereby external factors heighten the effects of ageing, and 'successful ageing' where external factors were thought to have a neutral or positive role on an individual's ageing 6. In 1997, Rowe & Kahn went on to propose a conceptual framework of successful ageing comprising low probability of disease and disability, maintained mental and physical functional capacity, and active engagement with life 7. Compared to the established scientific theories of Rowe and Kahn, older adults' concept of successful ageing has been viewed in more multidimensional terms ^{8,9}. There has been many studies published in attempts to further explore older adults' concept of successful ageing. A systematic review and meta-ethnography found that older adults perceive psychosocial components like social engagement and attitude as important components to successful ageing more often than physiological components like longevity and physical functioning 10. Despite growing research into successful ageing, there has not been a consensus on its definition and determinants.

Achieving successful ageing can help the economy not only by reducing medical and long-term care costs, but also preventing early exit from the workforce due to health issues and allowing older adults to contribute productively through non-paid activities 11. Having some understanding on attributes important in successful ageing may help with planning and preparing education programs and interventions to promote successful ageing as part of nationwide preventative measures. In 2016, the Healthy Ageing Strategy replaced the Health of Older People Strategy with a vision that "older people live well, age well, and have a respectful end of life in age-friendly communities" 12. Expectations about ageing have been associated with the belief of the importance to seek health care in older adults 13. In New Zealand, older adults were less likely to use primary mental health care service and even less likely to use psychological services than younger adults 14.

To identify potentially modifiable targets for increasing the likelihood of successful ageing, it is important to know what priorities are endorsed by this population. Phelan in 2004 explored how older adults rated the importance of twenty specific, non-repetitive attributes which originated from published literature in characterizing successful ageing ¹⁵. They compared two different cultural groups -

second-generation Japanese Americans and White Americans - ¹⁵ and subsequently, this questionnaire has been used to compare successful ageing definitions in different countries, cultures ¹⁶⁻¹⁸ and age groups ¹⁰. It was found that older adults' definition of successful ageing varies with different cultures, race, and ethnicities ^{19,20}. Hilton in 2012 found that Latinos living in the United States and Latin Americans in Brazil, Chile, Colombia, Cuba, Ecuador, Mexico and Uruguay have similar patterns of responses in the attributes deemed important in successful ageing ²¹ while the responses for Japanese Americans were more similar to the White American population than Japanese in Japan, suggesting the acculturation of the Japanese minority group ^{15,16}.

To date, the only attempt to conceptualize successful ageing in New Zealand was undertaken by Stephens and colleagues in 2015 ²². The authors identified six domains of functioning that were noted to be important by 156 New Zealanders ²². They used a capability approach with broad questions and did not focus specifically on the definition of successful ageing. Thus, this study aims to identify the perception of successful ageing in community-dwelling older adults in the region of Otago, New Zealand.

Methods

We aimed to explore the "lay perspective" of older adults regarding successful ageing. Several studies have found misconceptions about ageing among older adults that were linked to lifestyle behaviours. The present study was designed to improve identifying areas where interventions would be beneficial in improving community knowledge and offer perspectives that can foster successful ageing.

SAMPLING:

A survey was given to community-dwelling older adults who attended a series of public lectures on ageing in the Otago region of New Zealand. A series of three public lectures in 2024 was supported by the Dunedin Public Library, Otago, New Zealand. These were advertised in both the library itself, the library's Facebook pages and in the weekend edition of the Otago Daily Time, the most read newspaper in Otago, New Zealand. The talks were described as: "...talks about successful ageing and what it means for our communities..." The talks were held fortnightly in the evening and were free. Prior to each talk the survey questionnaire was distributed.

MEASUREMENTS:

A 20-item survey was used for this study. The items of the 20-item survey were extracted from Phelan's 2004 successful ageing survey ¹⁵. The survey contains twenty statements which represented non-repetitive attributes derived from successful ageing literature. The statements were rated on a 3-point Likert scale of 'not important', 'neutral' and 'important'. The respondent's age, gender, ethnicity, and highest educational qualification were also obtained. See appendix 1 for the detailed survey description.

ANALYSIS:

Participant characteristics were described using appropriate summary statistics and the proportions affirming each attribute as 'important' were presented.

The results were compared with existing literature to place the findings into cross-cultural context. Attributes rated as 'important' by 75% or more of the participants were determined. The cut-off of 75% was used as this was the same cut-off in other studies and allowed for direct comparison. In addition, the five highest and lowest attributes that were rated as 'important' in successful ageing were identified and compared with previous studies.

Ethical approval for the proposed survey was obtained from the University of Otago Ethics Committee and the Department of Psychological Medicine Ethics Committee # D17/231. Response by participants were anonymous and voluntary. Informed consent was implied by participants agreeing to complete and return the survey.

Results

DEMOGRAPHICS:

A total of 551 participants aged 65 years and older returned completed questionnaires. The mean age of participants was 75 years, and the majority were women (72%, n=394) (Table 1). Most of the participants were New Zealand Europeans (98.2%, n=536). Participants had differing education levels with 34.1% had completed secondary school, 49.9% had postgraduate education and 15% had higher education. Due to the very small proportion of Maori and Asian respondents in this study (4 and 6 respondents respectively), we were unable to analyse these populations. Therefore, only the data for New Zealand European participants was included in the final analysis, which gave a sample size of 536 participants.

Table 1: Demographics.

Total participants	n = 551	
Mean age (standard deviation)	75 years (6.28)	
Gender	n (%)	
Males	156 (28%)	
Females	394 (72%)	
Ethnicity		
European	536 (98.2%)	
Maori	4 (0.7%)	
Asian	6 (1.1%)	
Education		
Secondary	181 (34.1%)	
Postgraduate	257 (49.9%)	
Higher Education	77 (15.0%)	

ATTRIBUTES:

15 of the attributes were considered important by more than 75% of participants (Table 2). The attribute that most people thought was important in successful ageing was 'remaining in good health until close to death' (98%). This was followed by 'having family and friends who are there for me', 'being able to make choices about things that affect how I age, like my diet, exercise, and smoking' and 'being able to act according to my own inner standards and values' (95% for each attribute). The attributes of lowest importance were 'living a very long time' (25%), 'having the kind of genes that help me age well' (58%), 'being able to work in paid or volunteer activities after usual retirement age' (62%) and 'having no regrets about how I have lived my life' (65%).

Table 2: Response to Successful Ageing Questionnaire.

GENDER DIFFERENCES:

There were no significant differences in responses between participants with different education levels (p>0.05). There were statistically significant differences between the percentages males and females deemed important in successful ageing in 11 of the 20 attributes (p<0.005) (Table 2). More women found attributes of 'staying involved with the world and people around me' (96%), 'being able to meet all of my needs and some of my wants' (89%), 'not feeling lonely or isolated' (95%), 'adjusting to changes that are related to aging' (89%), 'having a sense of peace when thinking about the fact that I will not live forever' (82%), and 'continuing to learn new things' (88%) as important to successful ageing compared to men.

	Percentage of respondents who rated each attribute as 'Important'			
	Female (%)	Male (%)	Overall (%)	
1. Living a very long time	23	29	25	
2. Remaining in good health until death	98	98		
3. Feeling satisfied with life	95	94		
4. Having the kind of genes that help one age well*	61	51	58	
5. Having friends and family who are there for me	96	94	95	
6. Staying involved with the world and people**	96	86	93	
7. Being able to make choices about how to age*	96	91	95	
8. Being able to meet all my needs**	89	76	85	
9. Not feeling lonely or isolated**	95	86	93	
10. Adjusting to changes related to aging**	89	74	85	
11. Being able to take care of myself	89	91	90	
12. Having a sense of peace when I think in dying**	82	68	78	
13. Having feelings of influencing others*	74	63	70	
14. Having no regrets about how I lived my life*	69	57	65	

	Percentage of respondents who rated each attribute as 'Important'			
	Female (%)	Male (%)	Overall (%)	
15. Being able to work after usual retirement	64	58	62	
16. Feeling good about myself	92	85	90	
17. Being able to cope with challenges*	96	90	94	
18. Remaining free of chronic disease	84	84	84	
19. Continuing to learn new things**	88	75	84	
20. Being able to act according to my own values	96	93	95	
Mean			82	
Number of items 75% or more			15	

^{*} difference in response between female and male (p<0.05);

Discussion

We aimed to identify the perception of successful ageing in community-dwelling older adults in New Zealand. New Zealand Europeans in this study identified 75% of the attributes from Phelan's questionnaire 15 as important to the definition of successful ageing. This is in line with Rowe and Khan's model of successful ageing 7, as they rated attributes important to successful ageing in physical health and functioning ('good health', 'independence'), absence of disability and disease ('free from chronic diseases') and staying engaged ('staying involved with the world and people'). Additional attributes were also important, such as 'life satisfaction', 'ability to make own choices', 'not feeling lonely or isolated', 'continuing to learn new things' and 'ability to act according to own values.

The current study is consistent with Fernandez-Ballesteros findings, which showed 6 attributes being important to successful ageing across all cultures ¹⁷. These were 'good health', 'satisfied with life', 'having friends and family present', 'adjusting to changes', 'taking care of oneself (independence)' and 'free of chronic disease'. Other published studies ^{10,18,21} have replicated these results as well. This suggests the universality of a core multidimensional older adults' concept of successful ageing involving physical, functional, psychological, and social aspects. On the other hand, longevity ('living a very long time') has consistently been shown to be the least important attribute of successful ageing ¹⁷.

Four of the highest-ranking attributes in the current study: 'having good health', 'family/friends', 'control of lifestyle factors' and 'coping with ageing challenges' and all the five lowest ranking were similar between the New Zealand European and an Australian European sample ¹⁸. However, New Zealand Europeans placed more importance on 'being able to act according to own inner standards and values compared to Australian Europeans. Looking into aspects of life valued by older adults in New Zealand, Stephen and colleagues in 2015 identified autonomy as one out of the six important domains of functioning ²². This included the ability to make own decisions and the ability to live independently. This may explain the subtle difference in importance across the cultures.

This study, like most of the previous studies that used Phelan's successful ageing questionnaire ¹⁵, was focussed on older adults. Interestingly, when compared to younger adults, there were some similarities and important differences. Cosco in 2015 administered the successful

ageing questionnaire to 393 younger adults aged 18 to 35 years in Europe - Belgium, Germany, Netherlands, Romania, Switzerland and Turkey - and found that similar to older adults, psychosocial components were most important, that is attributes of 'feeling good about self', 'having friends and family', while biomedical components such as 'longevity' and 'genes' were least important 10. However, younger adults deemed biomedical and independence-related components to be less important than older populations. Younger adults also placed less importance on components with proximity to death such as 'remaining in good health until close to death' and 'being able to take care of myself until close to the time of my death' 10.

Recently, in a comment published in The Lancet, Sabine Oertelt-Prigone urged for ageing research to be sensitive to age and gender ²³. The results from the current study indicate a possible gender difference in the definition of successful ageing. More women in this study identified psychological and social components as important attributes to successful ageing compared to men. Women also placed more importance in learning new things. Men in this study appeared to have placed more importance on independence - 'taking care of oneself until close to death' although this was not statistically significant. Jonsson and colleagues found that older men in Denmark with multimorbidity related to core components of successful ageing with gendered interpretations ²⁴. The men in the Jonsson study identified three themes of independency in successful ageing which were unaided successful ageing - living unaided and managing own treatments, vicarious successful ageing having relationships that uphold or associated with power and status, and masculine successful ageing - having certain traditionally male-specific values, that is physical strength and remaining in control of own body ²⁴. A study with a larger sample size may be able to identify if there are gender differences on the importance of independency in the definition of successful ageing.

Limitations of the present study are the small sample size and selection bias. Participants in this study attended a public lecture and were more likely to be from higher socio-economic status, independent in mobility and without significant cognitive, visual, hearing or mobility issues. Our convenience sample did not include sufficient Māori, Pacific Islander or Asian population and therefore not representative of the general population of New Zealand. It was previously observed that different values between cultures may lead to differences in the ratings of the items considered important in successful ageing ¹⁶.

^{**} difference in response between female and male (p<0.005).

Other study methods like population-wide postal or email surveys may improve generalisability although this has been found to have lower response rates ²⁵. Studies that aim to better include older Māori participants require attention to appropriate recruitment methods including formation of support groups and involvement of local tribal organisations and health providers, supplemented by word of mouth, publicity and raising community awareness ²⁶.

Another limitation of this study is that the attributes in the successful ageing questionnaire were identified from published Western literature prior to 2004 and is likely to be missing attributes considered important to successful ageing. For example, an open-ended question on what successful ageing means to Latinos living in America above the age of 50 years old identified six themes that were not fully captured in the Phelan's successful ageing questionnaire, including acceptance, functioning, financial well-being and spirituality 21. Our findings suggest that for cohorts similar in ethnicity, language and cultural history - Caucasian Englishspeakers – there are many commonalities in conceptualizing successful aging.

Recent studies suggest that the attributes listed in Phelan's successful ageing questionnaire 15 are very limited and researcher driven. In 2019, Teater and Chonody published a scoping review of existing literature to answer the question of how older adults themselves define successful ageing ²⁷. They found that when asked through open-ended questions, older adults' definition of successful ageing encompassed a much wider range with attributes across 12 main themes that cover social, psychological, physical, financial, environmental, and spiritual aspects ²⁷. Older adults acknowledged that despite the changes associated with getting older, one can still achieve successful ageing with positive thinking, spirituality, adaptation and acceptance. In addition, Teater and Chonody identified that external resources, environmental factors and finance and thus, social policies affect one's ability to age successfully 27.

As there are no studies from New Zealand reporting on successful ageing it was important to compare our findings with international publications to place our findings in perspective. See Table 3 for comparison of this study's findings with previous studies. See Table 4 for summary of highest and lowest endorsed items of successful aging.

Table 3: Comparison with previous studies.

	NZ Europea	Anglo- n Australian	White American	European	Latin American	Latino	Japanese American	Japanese	Chinese Australian	Young Europeans
	n=536 Current study	n=152 Tan 2010	n=1173 Phelan 2004	n=1189 Fernandez-B 2008	allesteros	n=60 Hilton 2012	n=717 Phelan 2004	n=5207 Matsubayash i 2006	n=116 Tan 2011	n=393 Cosco 2015
1. Living a very long time	25	29	29	56	61	63	27	48	40	24
2. Remaining in good health until death	98	97	95	99	91	95	93	91	96	87
3. Feeling satisfied with life	94	89	84	95	93	90	78	81	86	95
4. Having the kind of genes for ageing well	57	66	70	87	77	88	60	83	64	44
5. Having friends and family there for me	, •	91	90	97	95	87	86	83	83	96
6. Staying involved with the world and people	93	93	88	92	86	85	77	63	85	91
7. Having control over lifestyle factors	95	96	92	94	92	93	85	72	85	90
8. Being able to meet all my needs	86	85	92	97	94	90	81	59	77	88
9. Not feeling lonely or isolated	93	85	84	93	78	90	75	69	81	97
10. Adjusting to changes related to aging	85	86	83	87	86	88	76	76	80	91
11. Being able to take care of myself 12. Having a sense of peace when I think in dying 13. Having feelings of influencing others	90	91	95	98	93	93	93	87	92	81
	, ,	73	75 [‡]	85	85	95	72	74	80	83
	• •	66	67	76	85	88	55	45	57	82
14. Having no regrets about how lived my life		59	67	86	77	87	61	69	69	92
15. Being able to work after usua retirement	62	69	50	63	81	75	43	47	55	58
16. Feeling good about myself	90	85	85	98	95	96	79	70	88	97
17. Being able to cope with challenges 18. Remaining free of chronic disease	94	95	93	90	92	95	84	64	76	95
	84	85	90	96	77	93	91	81	91	76
19. Continuing to learn new things		74	79	69	89	93	62	58	70	82
20. Being able to act according to my own values	95	89	92	94	96	98	81	65	84	94
Mean	82	80	80	87	86	89	73	69	75	82
Number of items 75% or more	15	13	14	1 <i>7</i>	19	19	13	7	14	17
Number of items 90% or more	10	6	8	12	9	12	3	1	3	10

[‡] Recorded as 74.6 and not included as >75% in previous studies.

Table 4: Comparison of highest and lowest rankings among European population.

	NZ European	Anglo-Australian	White American	European	Young European
	Current	Tan 2010	Phelan 2004	Fernandez-Ballesteros 2006	Cosco 2015
<u>Highe</u>	st Ranking				
1	Good health	Good health	Good health	Good health	Not lonely/ isolated
2	Friends and family present	Control lifestyle factors	Independence	Independence	Feel good about self
3	Act on inner standards	Cope with ageing challenges	Cope with ageing challenges	Feel good about self	Friends and family present
4	Control lifestyle factors	Staying involved with world and others	Act on inner standards	Friends and family present	Satisfied with life
5	Cope with ageing challenges	Friends and family present	Meet all needs and some wants	Meet all needs and some wants	Cope with ageing challenges
Lowe	st Ranking				
16	Positive influence on others	Able to work	Good genes	No regrets	Independence
1 <i>7</i>	No regrets	Positive influence on others	Positive influence on others	Positive influence on others	Free of chronic disease
18	Able to work	Good genes	No regrets	Learn new things	Able to work
19	Good genes	No regrets	Able to work	Able to work	Good genes
20	Longevity	Longevity	Longevity	Longevity	Longevity

Successful ageing is a concept that has gained acceptance and significance internationally among gerontologists. Since the term "successful ageing" was coined, diverse models and theories conceptualizing what it means to age successfully have been proposed. The fundamental characteristics of several popular models of ageing successfully have recurring themes. The most common themes include the importance of engaging in social relationships, good cognitive and physical functioning, the avoidance of disease and disability, and resilience. These themes are reflected in the present survey ²⁸. Examining lay older adults' perspectives on successful ageing can enhance our understanding of what successful ageing means. A systematic review of studies from multiple countries identified 23 studies conducted in 13 countries across North America, Western Europe, the Middle East, Asia, and Oceania. Across all regions represented in this review, older adults most frequently referred to themes of social engagement and positive attitude in their own lay definitions of successful ageing. Lay definitions of successful ageing varied by country and culture. These findings along with findings of the present survey suggest that gerontology professionals in fields including healthcare, health psychology, and public health may best serve older adults by providing services that align with older adults' priority of maintaining strong social engagement as they age 29.

Conclusion:

The results from this study show similarities between New Zealand Europeans and other European populations and

indicates some gender differences in older adults' perception of successful ageing. Although our study findings are consistent with a multi-dimensional concept of successful ageing, the 20 items previously identified in Phelan's survey (Phelan, Anderson et al. 2004) may be too limiting. Further studies will need to include Māori, Pacific Islander and Asian population in New Zealand as well we qualitative components to capture attributes not included in the current questionnaire in order to better understand older adults' definition of successful ageing in New Zealand.

Funding: This research was funded by Royal Australian New Zealand College of Psychiatry, grant number The Trisno Family Grant.

Institutional Review Board Statement: Ethical approval for the proposed survey was obtained from the University of Otago Ethics Committee and the Department of Psychological Medicine Ethics Committee # D17/231. Response by participants were anonymous and voluntary.

Informed Consent Statement: Informed consent was implied by participants agreeing to complete and return the survey.

Data Availability Statement: Data will be provided upon request to the corresponding author.

References

- 1. Zeifman L, Hertog S, Kantorova V, Wilmoth J. A world of 8 billion. 2022.
- 2. Fasoro AA. Successful ageing and trajectories of health among New Zealand older adults. 2022.
- 3. Michel JP, Sadana R. "Healthy Aging" Concepts and Measures. Journal of the American Medical Directors Association 2017; **18**(6): 460-4.
- Pressey SL, Simcoe E. Case study comparisons of successful and problem old people. J Gerontol 1950; 5(2): 168-75.
- 5. Baker JL. The unsuccessful aged. Journal of the American Geriatrics Society 1959; **7**(7): 570-2.
- Rowe JW, Kahn RL. Human aging: usual and successful. Science (New York, NY) 1987; 237(4811): 143-9.
- 7. Rowe JW, Kahn RL. Successful aging. The Gerontologist 1997; **37**(4): 433-40.
- Bowling A, Iliffe S. Which model of successful ageing should be used? Baseline findings from a British longitudinal survey of ageing. Age and ageing 2006; 35(6): 607-14.
- Jopp DS, Wozniak D, Damarin AK, De Feo M, Jung S, Jeswani S. How could lay perspectives on successful aging complement scientific theory? Findings from a u.s. And a German life-span sample. The Gerontologist 2015; 55(1): 91-106.
- Cosco TD, Lemsalu L, Brehme DF, et al. Younger Europeans' conceptualizations of successful aging. Journal of the American Geriatrics Society 2015; 63(3): 609-11.
- 11. Okamoto S, Sakamoto H, Kamimura K, Komamura K, Kobayashi E, Liang J. Economic effects of healthy ageing: functional limitation, forgone wages, and medical and long-term care costs. *Health Econ Rev* 2023; **13**(1): 28.
- Parr-Brownlie LC, Waters DL, Neville S, Neha T, Muramatsu N. Aging in New Zealand: Ka haere ki te ao pakeketanga. The Gerontologist 2020; 60(5): 812-20.
- 13. Sarkisian CA, Hays RD, Mangione CM. Do older adults expect to age successfully? The association between expectations regarding aging and beliefs regarding healthcare seeking among older adults. *Journal of the American Geriatrics Society* 2002; 50(11): 1837-43.
- Cunningham R, Kvalsvig A, Peterson D, et al. Stocktake report for the mental health and addiction inquiry. Wellington, New Zealand: University of Otago 2018.
- 15. Phelan EA, Anderson LA, LaCroix AZ, Larson EB. Older adults' views of "successful aging"--how do they compare with researchers' definitions? *Journal of the American Geriatrics Society* 2004; **52**(2): 211-6.
- Matsubayashi K, Ishine M, Wada T, Okumiya K. Older adults' views of "successful aging": comparison of

- older Japanese and Americans. *Journal of the American Geriatrics Society* 2006; **54**(1): 184-7.
- 17. Fernández-Ballesteros R, García LF, Abarca D, et al. Lay concept of aging well: cross-cultural comparisons. *Journal of the American Geriatrics Society* 2008; **56**(5): 950-2.
- 18. Tan J, Ward L, Ziaian T. Experiences of Chinese immigrants and Anglo-Australians ageing in Australia: a cross-cultural perspective on successful ageing. Journal of health psychology 2010; 15(5): 697-706.
- Bowling A, Iliffe S. Psychological approach to successful ageing predicts future quality of life in older adults. Health and quality of life outcomes 2011;
 13.
- 20. Laditka SB, Corwin SJ, Laditka JN, et al. Attitudes about aging well among a diverse group of older Americans: implications for promoting cognitive health. The Gerontologist 2009; 49 Suppl 1: S30-9.
- 21. Hilton JM, Gonzalez CA, Saleh M, Maitoza R, Anngela-Cole L. Perceptions of successful aging among older Latinos, in cross-cultural context. J Cross Cult Gerontol 2012; 27(3): 183-99.
- 22. Stephens C, Breheny M, Mansvelt J. Healthy ageing from the perspective of older people: a capability approach to resilience. *Psychol Health* 2015; **30**(6): 715-31.
- 23. Oertelt-Prigione S. Why we need ageing research sensitive to age and gender. Lancet Healthy Longev 2021; **2**(8): e445-e6.
- 24. Jønsson AR, Reventlow S, Guassora AD. How Older Men With Multimorbidity Relate to Successful Aging. The journals of gerontology Series B, Psychological sciences and social sciences 2020; **75**(5): 1104-12.
- 25. Palonen M, Kaunonen M, Åstedt-Kurki P. Exploring how to increase response rates to surveys of older people. *Nurse Res* 2016; **23**(5): 15-9.
- 26. Dyall L, Kepa M, Hayman K, et al. Engagement and recruitment of Māori and non-Māori people of advanced age to LiLACS NZ. Australian and New Zealand journal of public health 2013; 37(2): 124-31.
- 27. Teater B, Chonody JM. How Do Older Adults Define Successful Aging? A Scoping Review. International journal of aging & human development 2020; 91(4): 599-625.
- 28. Waddell C, Van Doorn G, Power G, Statham D. From Successful Ageing to Ageing Well: A Narrative Review. *The Gerontologist* 2024; **65**(1).
- 29. Reich AJ, Claunch KD, Verdeja MA, et al. What Does "Successful Aging" Mean to you? Systematic Review and Cross-Cultural Comparison of Lay Perspectives of Older Adults in 13 Countries, 2010-2020. J Cross Cult Gerontol 2020; 35(4): 455-78.

Appendix 1: Questionnaire

Introduction: We are conducting research for the University of Otago. We have a short -5-minute - questionnaire. We want to know how to improve the health of people like you. We are interested in finding out what people think about successful ageing.

Would you be able to take part in this survey?

Age:

Gender:

Ethnicity:

Education; what was your highest educational qualification:

How important are the following attributes to characterizing successful aging?

I= important

N= neutral

NI= not important

- 1. Living a very long time.
- 2. Remaining in good health until close to death.
- 3. Feeling satisfied with my life the majority of the time.
- 4. Having the kind of genes (heredity) that help me age well.
- 5. Having friends and family who are there for me.
- 6. Staying involved with the world and people around me.
- 7. Being able to make choices about things that affect how I age, like my diet, exercise, and smoking.
- 8. Being able to meet all of my needs and some of my wants.
- 9. Not feeling lonely or isolated.
- 10. Adjusting to changes that are related to aging.
- 11. Being able to take care of myself until close to the time of my death.
- 12. Having a sense of peace when thinking about the fact that I will not live forever.
- 13. Feeling that I have been able to influence others' lives in positive ways.
- 14. Having no regrets about how I have lived my life.
- 15. Being able to work in paid or volunteer activities after usual retirement age (65).
- 16. Feeling good about myself.
- 17. Being able to cope with the challenges of my later years.
- 18. Remaining free of chronic disease.
- 19. Continuing to learn new things.
- 20. Being able to act according to my own inner standards and values