The Wellbeing of Older Chinese Immigrants following the COVID-19 Pandemic in Aotearoa New Zealand

From the Health, Work and Retirement Chinese Language Survey

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ACKNOWLEDGEMENTS

This research was undertaken by the Health and Ageing Research Team at Massey University in partnership with the CNSST Foundation (formally known as Chinese New Settlers Services Trust). We thank all who shared their experiences with the research team to provide valuable insight into the experiences of Chinese elders ageing in Aotearoa New Zealand.

We particularly thank the social workers and other frontline teams supporting the older Chinese community following the initial 2020 periods of lockdown for sharing their insights regarding key issues arising in the community. This research is funded by the Health Research Council of New Zealand (HRC) COVID-19 Equity Response Project Grant 20/1384.

KEY FINDINGS

This research examined the experiences and wellbeing of older Chinese immigrant New Zealanders during the third year of the COVID-19 pandemic in Aotearoa New Zealand (2022). A convenience sample of older Chinese immigrants was surveyed through community networks to provide cross-sectional information regarding their experiences, needs, and wellbeing.

Overview of the findings

Socio-demographics:

- Chinese participants (n = 1159) were aged between aged 55 and 80+ years. A majority were female (61%), over 30% had post-secondary school qualifications and most were married (81%). 53% had been living in Aotearoa New Zealand for more than 15 years.
- Only 11% reported living alone and 40% of those lived in a home owned by their child or other relative.
- Over 80% were not in paid work.
- Around 40% reported a low material standard of living, and only 36% reported being satisfied with their standard of living. Around 21% felt their total income was not enough to meet their everyday needs.

Health and wellbeing:

- Over 50% reported their overall health status as good or better.
- Almost 60% reported having two or more chronic illnesses.
- While less than 50% reported feeling depressed or anxious, 76% experienced loneliness.
- A majority engaged with mild (51%) and moderate physical activities (42%) more than once a week.
- Nearly 70% did not engage with any volunteer activities.

Experiences of the COVID-19 Pandemic

- More than 15% felt their physical health, mental health and economic wellbeing had been affected.
- Over 90% had received a vaccine against the COVID 19.
- Around 14% had required government and NGO assistance.
- Up to 38% reported that a language barrier prevented them gaining access to support services.
- More than 70% used the internet to connect with family and friends, and access news, health related information, or entertainment.
- Around 19% reported that they had experienced discrimination because of their ethnicity.

The impact of discrimination on wellbeing

- Greater experiences of discrimination were associated with poorer overall health, and higher levels of chronic illnesses, loneliness, anxiety and depression. Discrimination was associated with income was insufficient to meet their everyday needs and have less frequent internet use.

INTRODUCTION

Robust evidence is needed to design effective psychosocial interventions supporting the needs of Aotearoa's diverse communities both during and in the aftermath of pandemic events. Older Chinese immigrants are an emerging demographic group who remain almost wholly unrepresented in studies of ageing in New Zealand.

Although several qualitative and quantitative surveys have been undertaken to investigate the impact of COVID-19 pandemic on Chinese adults (e.g., Asia New Zealand Foundation – Te Whītau Tūhono and Colmar Brunton, 2021; Gao, 2020; Irvine & Wing, 2021; Lee et al., 2021; Nielsen, 2021; Ran & Liu, 2021; Song & McDonald, 2021; Zhu, 2020), there has been relatively little representation of the experiences of older Chinese immigrants.

Older Chinese immigrants have faced intersecting challenges following the COVID-19 pandemic, associated with age and health-related risk factors for COVID-19, race-related discrimination, and language and technology related barriers to accessing public health information and services. Importantly, findings from research into major crises show that the mental health needs and psychosocial impacts of major crises last many years (Charlson et al., 2019) and require recovery activities to be continued and adapted for an extended period. To support pandemic responses with view of the future wellbeing of communities, there is a need to both understand the unique challenges of the COVID-19 pandemic period on affected groups, and to monitor its short - and medium term impacts.

This report aims to describe the experiences of a large sample of older Chinese immigrants living in the Auckland region during the pandemic. Within Aotearoa New Zealand experiences of the pandemic have varied by location. Auckland is New Zealand's largest urban centre, and its population has experienced the greatest disruptions from the pandemic, not only as a high-density urban port, but having experienced more lockdowns of longer duration. The report provides a snapshot of health and wellbeing (Blair et al. 2022), experiences of barriers to health service use, experiences of discrimination, and the association of experiences of discrimination with wellbeing outcomes among older Chinese immigrants in this context.

There was research conducted in partnership between the Health and Ageing Research Team at Massey University and the CNSST Foundation. The CNSST Foundation is an Auckland-based organisation employing multidisciplinary team of health, social and welfare support professionals and workers to provide services to the New Zealand Chinese community such as social housing, social and cultural services, translation, and education. Indicators of health and wellbeing in later life included in the survey were identified from the New Zealand Health, Work and Retirement study (Allen et al. 2022). Content assessing the impacts of the pandemic older Chinese immigrants were identified in consultation with social service professionals from the CNSST Foundation who provided font-line care to older Chinese immigrants following the first period of lockdown March-April 2020.

The quantitative survey incorporated existing validated simplified-Chinese translations of measures of depression, anxiety, and loneliness as primary indicators of wellbeing, with the remaining indicators translated from English to Simplified Chinese by CNSST Foundation translation services. The current research was conducted in April-May 2022 as restrictions associated with the omicron variant outbreak were reduced.

METHOD

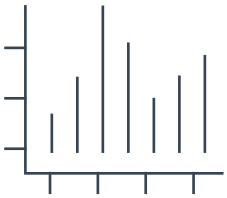
A convenience sample of older Chinese immigrants was surveyed through community networks to provide cross-sectional information regarding their experiences, needs, and wellbeing. Postal and online surveys were translated and distributed to a community sample by the CNSST Foundation in April-May 2022. Data collection was approved by the Massey University Human Research Ethics Committee [SOB 21/26].

PARTICIPANTS

Chinese immigrants aged 55-80 living in the Auckland region were invited to respond to the survey via existing contact databases held by the CNSST Foundation e.g., notifications for attendees of cultural events, social housing clients, grocery delivery services, and adult education institute. To support representation of older Chinese immigrants not actively engaged with CNSST Foundation networks, the questionnaire was also administered via WeChat, as an established secure data collection platform that hold a hight level of familiarity and engagement in the Chinese community. The online questionnaire was promoted to older Chinese immigrants living in the Auckland region via the CNSST Foundation's newsletters and online WeChat social media channel. Participants were offered a 2 litre bottle of cooking oil in recognition of their time and contribution to the research, which could be redeemed at CNSST Foundation offices or events in Auckland. Overall, 625 paper based and 534 online questionnaires were completed (total n = 1159).

ANALYSES

Descriptive statistics were used to characterise the respondent sample. To assess the relationship between Chinese older adults' feelings of discrimination and demographic and psychosocial factors, bivariate correlations were conducted using Pearson r correlations.



MEASURES

Survey indicators included core health and wellbeing measures from the New Zealand Health, Work and Retirement study. An additional COVID- 19 module was compiled in response to the literature and in consultation with social workers engaged in support of older Chinese immigrants following the initial 2020 period of pandemic lockdown in Auckland. Existing validated Chinese translations of measures were used where available. The remaining survey measures were prepared in English and translated by professional translation services into simplified Chinese before being reviewed by bilingual project staff at Massey University and the CNSST Foundation.

Demographic and social factors

Participants were asked to report their age, ethnicity, relationship status, highest level of education, employment status, housing tenure, household composition, and year of first immigration to NZ.

Economic wellbeing

Economic wellbeing was assessed using the ELSI-SF Global Self-Rating scale. These 3-items ask participants to assess their material standard of living (things that money can buy): 'Generally, how would you rate your material standard of living?' High (5) to Low (1); 'Generally, how satisfied are you with your current material standard of living?' Very satisfied (5) to Very dissatisfied (1); 'How well does your total income meet your everyday needs for such things as accommodation, food, clothing and other necessities?' Not enough (1) to More than enough (4).

COVID-19 vulnerability – Overall health and chronic conditions

Overall self-rated health was assessed using responses to item 'In general, would you say your health is: (5) Excellent, (4) very good, (3) Good, (2) Fair, or (1) Poor'. People at higher risk of severe illness from COVID-19 were identified by diagnoses of health conditions that were highlighted by the NZ Government as placing individuals 'at risk' and categorised as having priority access to a COVID-19 vaccine. Participants were asked to indicate whether a health professional had ever diagnosed them with: a serious and chronic respiratory condition, such as a chronic obstructive pulmonary disease (e.g., emphysema or chronic bronchitis); chronic kidney/renal disease; diabetes; a coronary heart condition (e.g., angina or heart attack); stroke; hypertension (high blood pressure), and/or; cancer (in the past 12 months) excluding basal and squamous skin cancers if not invasive.

Depression

Depression symptom frequency was assessed using the 10-item Center for Epidemiologic Studies Depression Scale (CES-D10: Andresen et al., 1994), designed for assessment of older adult populations in epidemiological studies. Participants indicated the frequency with which they had experienced each of ten symptoms of depression in the past 7 days. Items were recoded and summed such that higher scores indicated greater depression symptom frequency (range 0-30) and established cut off scores were used to describe the prevalence of clinically significant symptoms of depression (scores ≥ 10, reported as sample %). A validated simplified Chinese transition of this measure in (Zhang et al., 2011) was administered.

Anxiety

Symptoms of anxiety were assessed using the Geriatric Anxiety Inventory short form (GAI-SF: Byrne & Pachana, 2011), designed for the assessment of older adult populations in epidemiological studies. The GAI-SF comprises five questions assessing the presence of symptoms of anxiety in the past seven days against response options coded (0) No or (1) Yes with a summed total score range 0-5. Established cut off scores were used to describe the prevalence of clinically significant symptoms of anxiety (GAI-SF scores ≥ 3: Byrne & Pachana, 2011). A validated simplified Chinese translation of this measure (Dow et al., 2018) was administered.

Loneliness

The six-item de Jong Gierveld Loneliness Scale was used to assess experiences of social and emotional loneliness (Gierveld & Tilburg, 2006). Participants indicated the degree to which three items reflecting experiences of social loneliness (sample item: 'there are plenty of people I can rely on when I have problems') and three items reflecting experiences of emotional loneliness (sample item: 'I experience a general sense of emptiness') applied to the way they feel now. Response options were 'yes', 'more or less' or 'no'. Items were re-coded to provide a binary item score indicating any experience of loneliness, and item scores summed to indicate greater experiences of loneliness (range 0-6) with scores ≥ 2 considered to indicate loneliness (reported as sample %). A validated simplified Chinese transition of this measure (Leung et al., 2008) was administered.

Participation in sports or activities

Self-reported physical activity was assessed using questions employed in the Health Survey for England Physical Activity Validation Study and English Longitudinal Study of Ageing. Questions assessed the frequency of participation in vigorous (e.g., running or jogging, swimming, aerobics), moderately energetic (e.g., gardening, brisk walking) and mildly energetic (e.g. vacuuming, laundry/washing) physical activities. Responses regarding frequency with which respondents took part in these activities (i.e., more than once per week, once per week, one to three times per month, hardly ever).

Children and volunteering

Childcare was assessed against items assessing frequency with the respondents provides care for their grandchildren and/or other people's children on a scale of Yes, daily (4) Yes, weekly (3) Yes, occasionally (2) and No or N/A (1). Volunteering activity was assessed against item 'I contribute my time and/or labour to volunteer activities' against five response options Very often (4) to Never (0).

Caregiving commitments

Caregiving was assessed by caring for someone with a long-term illness, disability or frailty within the last 12 months (1) Yes, (0) No. Carers also indicated what their relationship was to the person in their care and frequency of caregiving (1) less often; (2) once every few weeks; (3) once a week; (4) several times per week, and (5) everyday).

Internet access and use

Participants were asked about their access to and frequency of use of the internet. Participants indicated yes/no whether they had had consistent access to the internet since the start of the COVID-19 pandemic. As research indicates that the reasons for which individuals use the internet are key for their impact on wellbeing among older adults in NZ (Szabo et al. 2018), the frequency with which older adults use the internet across three key domains were assessed i.e., to connect with friends and family (e.g., using social media, email or video chatting); to access information (e.g., news, health-related information, or entertainment); to complete personal tasks (e.g., for work, business, banking, or shopping). Frequency was assessed on a scale of Never (1), Once every few months (2), About once a month (3), Several times a month (4), Several times a week (5), Daily (6).

COVID-19 infection and vaccination status

Participants were asked 'Has a health professional or government health agency ever told you that you have COVID-19?' Yes/No. Vaccination status was assessed against item 'Have you received a vaccine against the COVID-19 coronavirus?' Yes/No.

Perceived impact of COVID-19

Perceived negative impact of the COVID-19 pandemic on respondent's physical health, mental health, and economic wellbeing were assessed using three questions each rated on a scale of Not at all (0), a little bit (1), moderately (2), quite a bit (3) and extremely (4).

Government and NGO assistance

Receipt of different types of hardship assistance as a result of the pandemic were assessed using Yes/No responses to the question 'Have you received any hardship assistance as a result of the COVID-19 pandemic?' Specific items included: Government assistance to support your business (if applicable); Assistance from lenders, such as a mortgage holiday from your bank; Government assistance such as welfare benefits; Material assistance from non-government organisations, such as food banks, and; A Kiwisaver hardship withdrawal.

Experiences of discrimination

Participant experiences of discrimination were assessed with Yes/No answers to two questions related to experiences since the start of the COVID-19 pandemic: 'Have you felt discriminated against due to being Chinese?' and 'Have you reduced interactions or activities due to concerns about discrimination?'. These items were derived from New Zealand Human Rights Commission (2021).

Barriers to service use

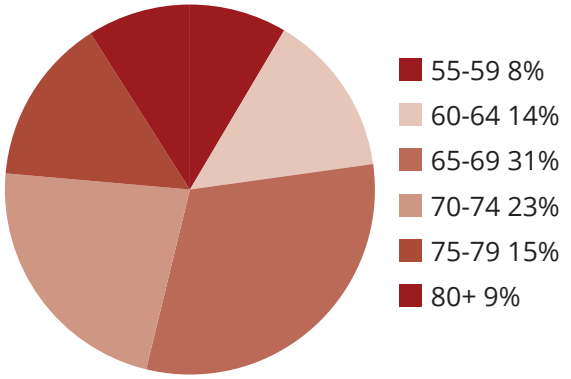
Barriers to services use associated with language or other reasons were assessed against Yes/No answers to five questions related to experiences since the start of the COVID-19 pandemic: 'Have you experienced anxiety around obtaining needed health or social services due to concerns about a language barrier?'; 'Have you delayed obtaining health or social services due to concerns about a language barrier?'; 'Have you experienced difficulties in accessing health or social care services due to a language barrier?'; 'Were you unable to access health or social care services due to a language barrier?'; 'Have you experienced difficulties or were unable to access health and social care services due to other reasons?'.

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

AGE

Just over 30% (n=355) of respondents were aged between 65 and 69 years, with 22% (n=259) aged 70-74, 14% (n=167) aged 75-79, 14% (n=163) aged 60-64, and 9% aged 80 years and over (n=103). Only 8% were (n=97) aged 55-59.

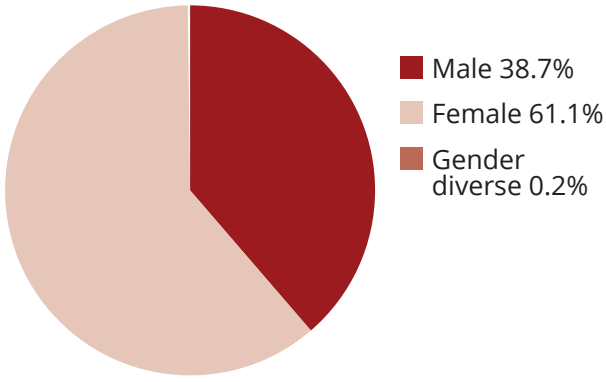
Figure 1. Distribution of Age in the sample



GENDER

Just over 60% (n=698) identified as female, 38% (n=442) male and 0.2% (n=2) as gender diverse.

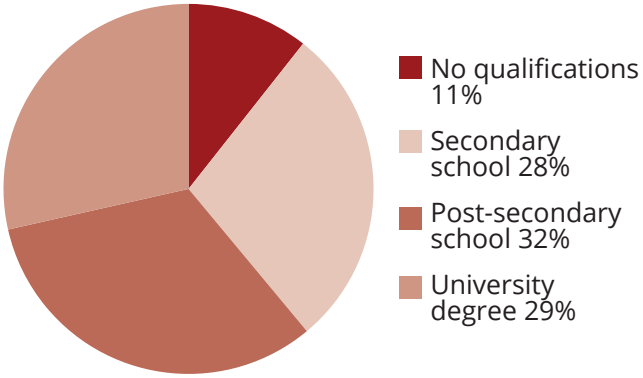
Figure 2. Distribution of Gender in the sample



EDUCATIONAL QUALIFICATIONS

Participants most frequently held a post-secondary school qualification (30%, n=321), followed by 28% (n=323) with a university degree, 28% (n=321) with secondary school qualification, and 10% (n=121) with no qualification.

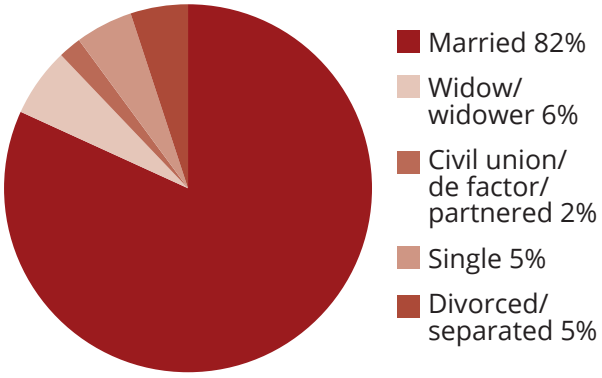
Figure 3. Distribution of Educational Qualifications



RELATIONSHIP STATUS

A majority were married (81%, n=937) while only 6% (n=65) were widowed or widower, 5% (n=62) single, and 5% (n=62) divorced or separated. Almost 2% (n=18) were in a civil union/de facto/partnered relationship.

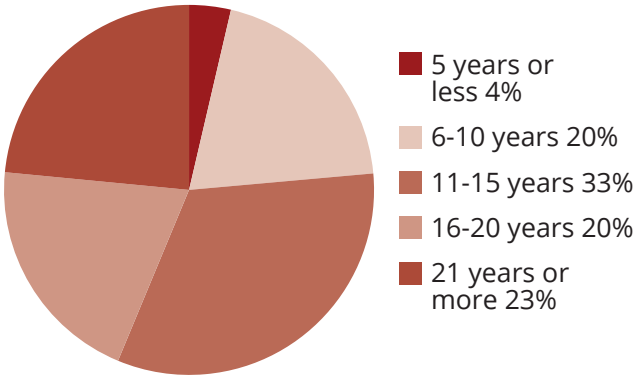
Figure 4. Distribution of Relationship Status in the sample



TIME IN AOTEAROA/ NEW ZEALAND

Respondents were largely long-term residents. 22% had lived in NZ for 21 years or more (n=254), 19% for 16 to 20 years (n=219), and 31% for 11 to 15 years (n=353), and 19% for 6 to 10 years (n=215). Only 3% had lived in NZ for years or less (n=39).

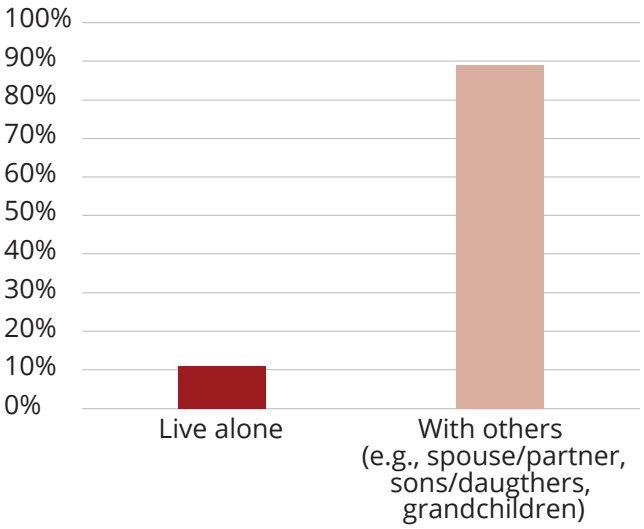
Figure 5. Distribution of Time in Aotearoa in the sample



HOUSEHOLD COMPOSITION

Only 11% (n=124) of respondents lived alone, while 89% (n=1035) lived with others (e.g., spouse/ partner, sons/daughters, grandchildren, or other extended families).

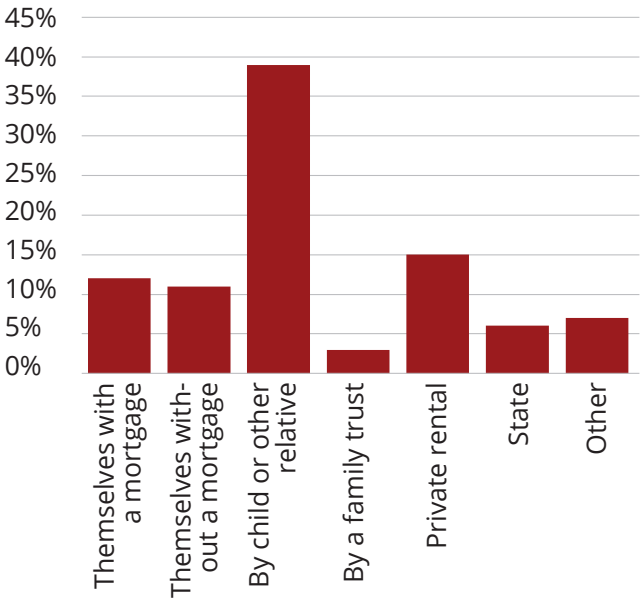
Figure 6. Distribution of Household Composition in the sample



HOUSING TENURE

Over 40% (n=488) reported that their primary residence was owned by their child or other relative (37%) or in a family trust (3%). Fewer (23%) owned their own home: 12% (n=142) owned with a mortgage, and 11% (n=122) owned without a mortgage. Only 21% were renting: 15% (n=178) were in private rental accommodation and 6% (n=66) were in state or council housing. A further 7% (n=86) reported some other type of housing tenure.

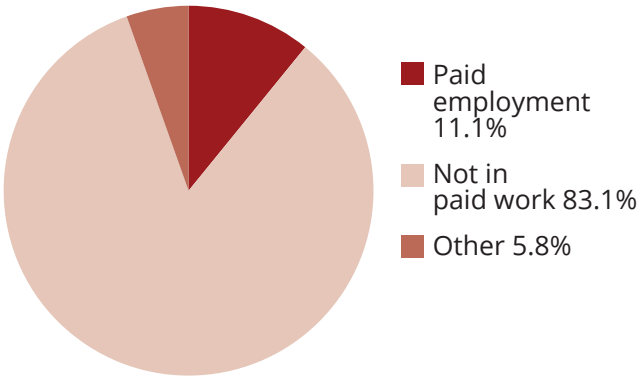
Figure 7. Distribution of Housing Tenure Types in the sample



EMPLOYMENT STATUS

A majority reported being in no paid employment (77.6%, n=899) while 10.3% (n=120) were in paid employment, 5.4% (n=63) reported an 'other' employment status, and 6.6% did not indicate their employment status.

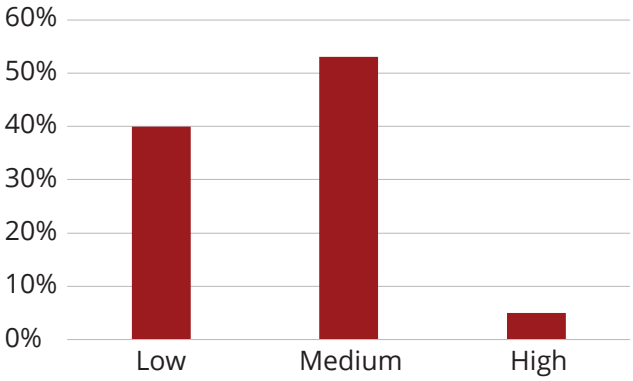
Figure 8. Distribution of observed Employment Status in the sample



ECONOMIC WELLBEING

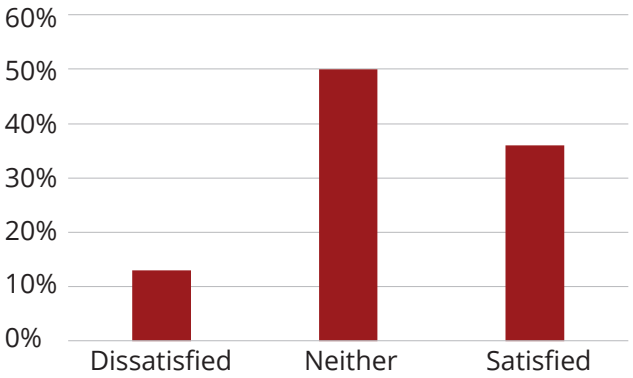
Older Chinese respondents to the survey displayed a range of economic situations. While perceptions of financial wellbeing and income were not high, few were dissatisfied with their situation. Nearly 40% (n= 462) reported that their levels of financial wellbeing were low while only 5% (n=59) considered their standard of living to be high.

Figure 9. Levels of Financial Wellbeing in the sample



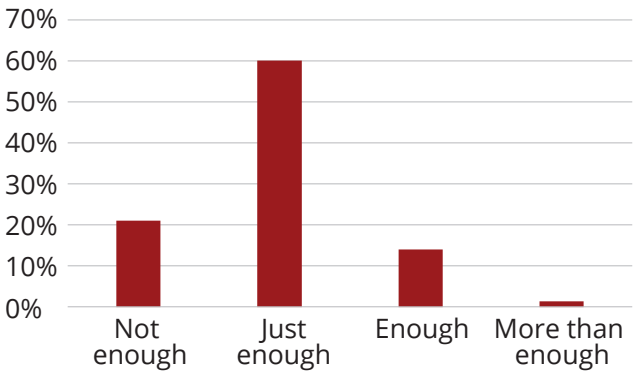
36% (n=416) of respondents were satisfied with their material standard of living while 13% (n=146) felt dissatisfied.

Figure 10. Levels of Material Standard of Living



Around 21% (n=245) felt their total income was not enough to meet their everyday needs for such things as accommodation, food, clothing and other necessities while 60% (n=695) reported just enough. Only 16% (n=182) felt it was enough or more than enough.

Figure 11. Levels of Income Meeting Needs

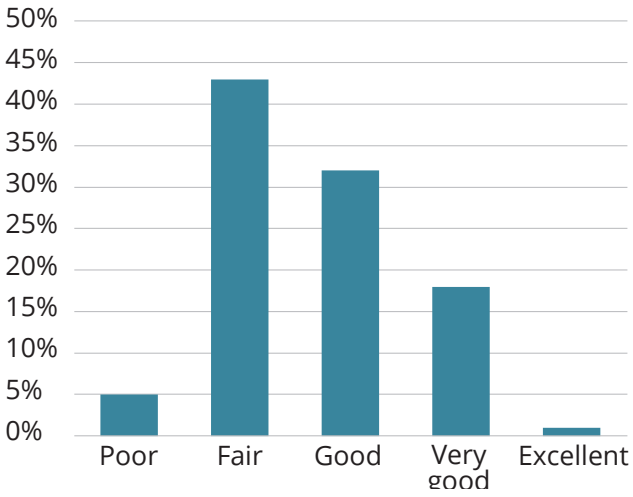


HEALTH AND WELLBEING

SELF-RATED HEALTH

Over 40% (n=494) reported their health was fair, followed by 32% (n=375) as good, and 18% (n=204) as very good. Only 1% (n=11) reported their health to be excellent while 5% (n=62) described their health as poor.

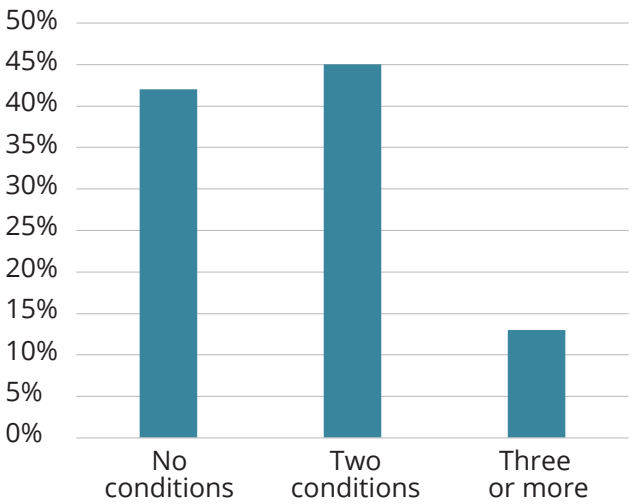
Figure 12. Levels of Self-rated Health



CHRONIC ILLNESSES

Only 42% (n=481) of the sample reported no chronic illnesses, while 45% (n=516) reported at least two conditions, and 13% (n=154) reported three or more conditions.

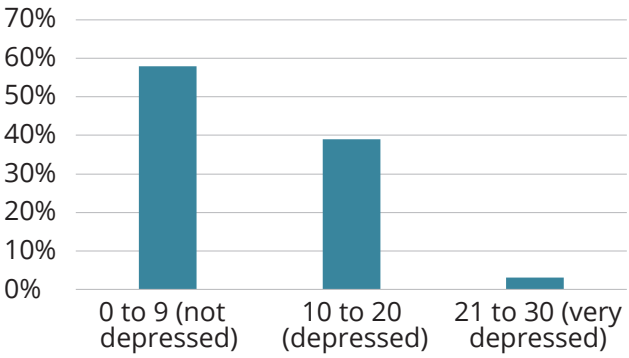
Figure 13. Number of Diagnosed Chronic Conditions



DEPRESSION

Nearly 60% (58%, n=668) reported not feeling depressed while 39% (n=452) reported feeling depressed and 3% (n=35) feeling very depressed.

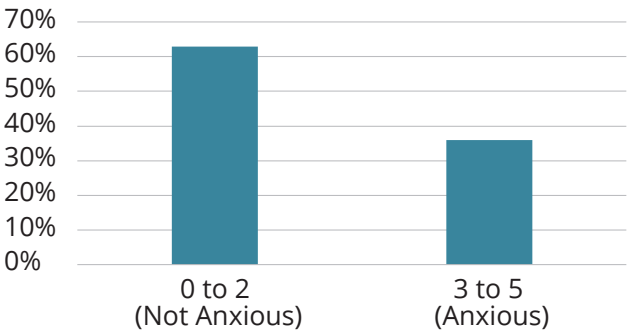
Figure 14. Depression Scores



ANXIETY

Just over half of this sample reported no anxiety (63%, n=732) and 36% (n=413) reported suffering from some levels of anxiety.

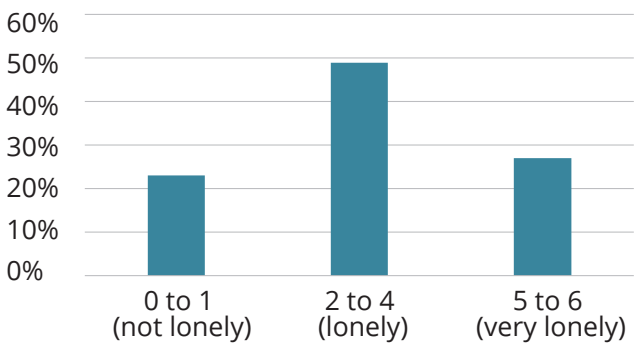
Figure 15. Anxiety Scores



LONELINESS

Over 70% (76%, n=883) reported feeling lonely compared to 23% (n=270) not feeling lonely.

Figure 16. Loneliness Scores

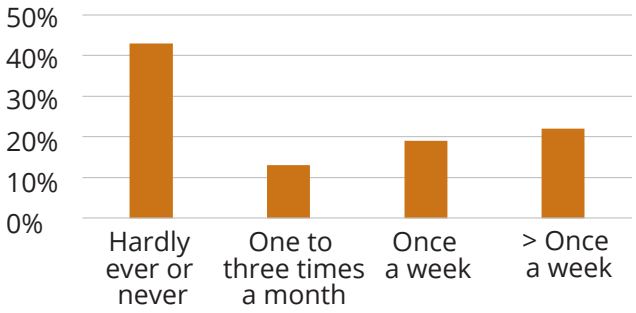


SOCIAL ENGAGEMENT

PARTICIPATION IN SPORTS OR ACTIVITIES

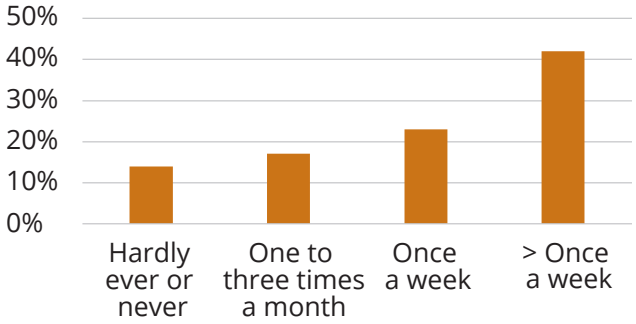
Most of this sample of Chinese older people (43%, n=502) hardly ever or never engaged in vigorous activities, with only 22% (n=256) exercising more than once a week, followed by 19% (n=216) at once a week and 13% (n=146) one to three times a month.

Figure 17. Frequency of Participation in Vigorous Physical Activities



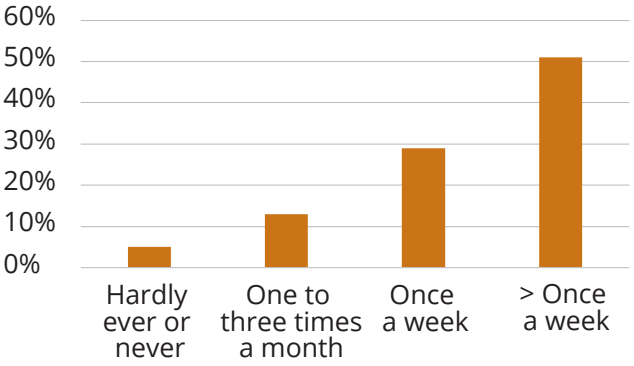
Over 40% (42%, n=485) reported participating in moderate activities more than once a week, followed by 23% (n=270) once a week, 17% (n=196) one to three times a month and 14% (n=164) as hardly ever or never.

Figure 18. Frequency of Participation in Moderate Physical Activities



Half of the sample (51%, n=595) participated in mild physical activities more than weekly, with 29% (n=338) once a week, 13% (n=149) one to three times a month and 5% (n=57) hardly ever or never.

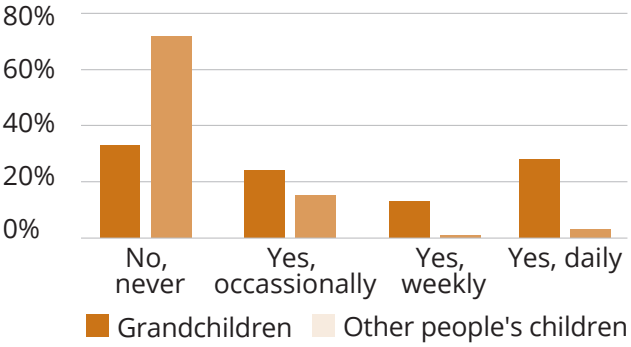
Figure 19. Frequency of Participation in Mild Physical Activities



CHILDCARE AND VOLUNTEERING

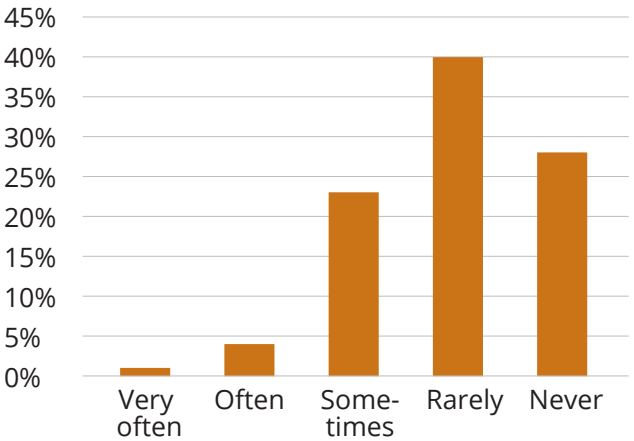
65% (65%, n=740) reported providing care for grandchildren and 19% (n=222) provided care to other people's children.

Figure 20. Reports of providing care for children



Around 29% (n=333) reported contributing time or labour to volunteer activities while 68% (n=782) reported rarely to never.

Figure 21. Frequency of Volunteering Activities



CAREGIVING COMMITMENTS

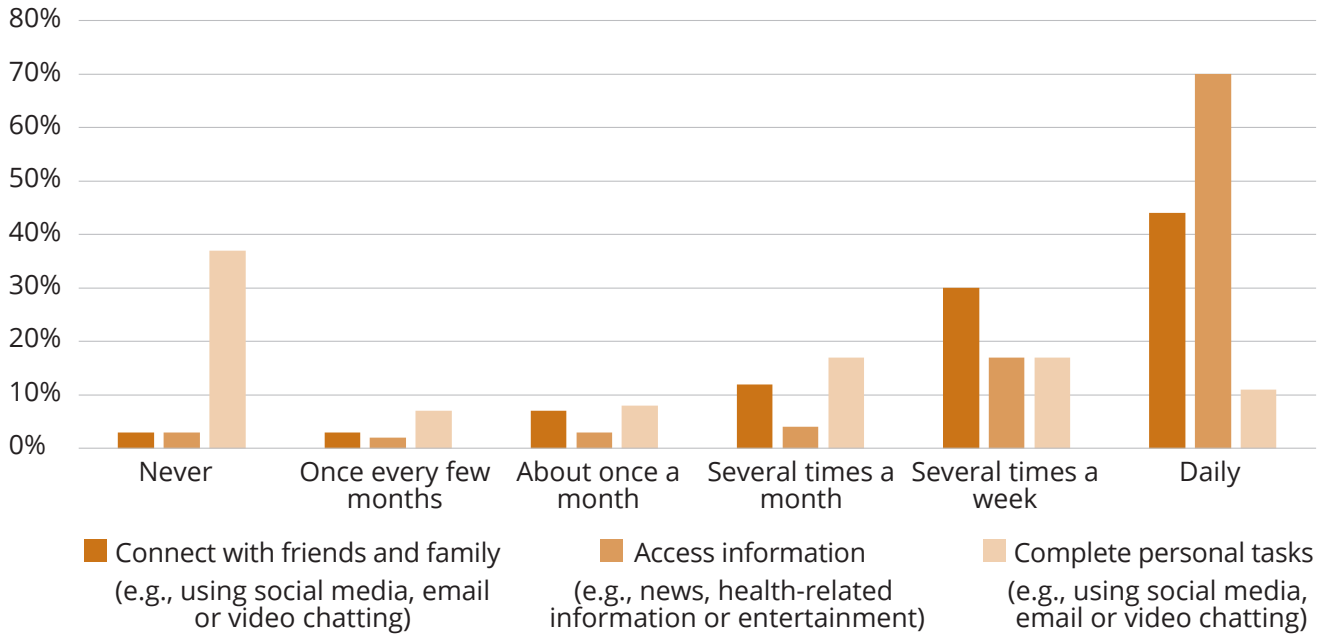
Overall, only 6% (n=74) reported to have provided care for someone with a long-term illness, disability or frailty within the last 12 months. On average, 4% (n=41) required their care or assistance in an everyday situation, 1% (n=15) for once a week to several times per week and 5% (n=55) for once every few weeks to less often. The person that they cared for normally lived with them (5%, n=57), 3% (n=36) lived alone, and 1% (n=14) lived with their family/whānau/friends.

INTERNET USE

The internet played a important part in facilitating access to information and social connection during the pandemic, perhaps particularly for those who face language barriers in engaging with traditional media outlets. Past longitudinal research on internet use among older adults in Aotearoa/New Zealand indicates that use of the internet for social reasons (e.g., connecting with family and friends) influenced wellbeing by its association with lower loneliness and engagement with a greater range of social activities (Szabó et al. 2018).

Around 74% (n=851) frequently ("several times a week" or "daily") used the internet to connect with friends and family while 87% (n=1005) frequently used the internet to access information . Around one third never used the internet to complete personal tasks, with only 28% (n=328) frequently using the internet for this purpose.

Figure 22. FFrequency of internet use by purpose for use



COVID-19 INFECTION AND VACCINATION STATUS

At the time of the survey, 93% (n=1075) reported that they had not been told by a health professional or government health agency that they had COVID-19. A large majority 93% (n=1080) had received a vaccine against COVID-19.

PERCEIVED IMPACT OF COVID-19

Most of the sample reported that the COVID-19 pandemic had had some (a little or moderate) negative impact on their physical health (55%, n=642), mental health (62%, n=722) and economic wellbeing (61%, n=704).

Around one fifth felt that COVID-19 pandemic had had greater impact (quite a bit or extremely) on their physical health (19%, n=216), mental health (22%, n=256) or economic wellbeing (23%, n=265), with 15% reporting this level of impact on all three.

In regard to hardship assistance received since the pandemic began, around 14% (n=166) received government assistance such as welfare benefits and material assistance from NGOs. The majority (93%, n=1076) did not require assistance from lenders such as a mortgage holiday from their bank and less than 2% (1.7% n=20) required a Kiwisaver hardship withdrawal.

Figure 23. Self-rated Negative Impact of the COVID-19 pandemic on Physical, Mental, and Economic Wellbeing

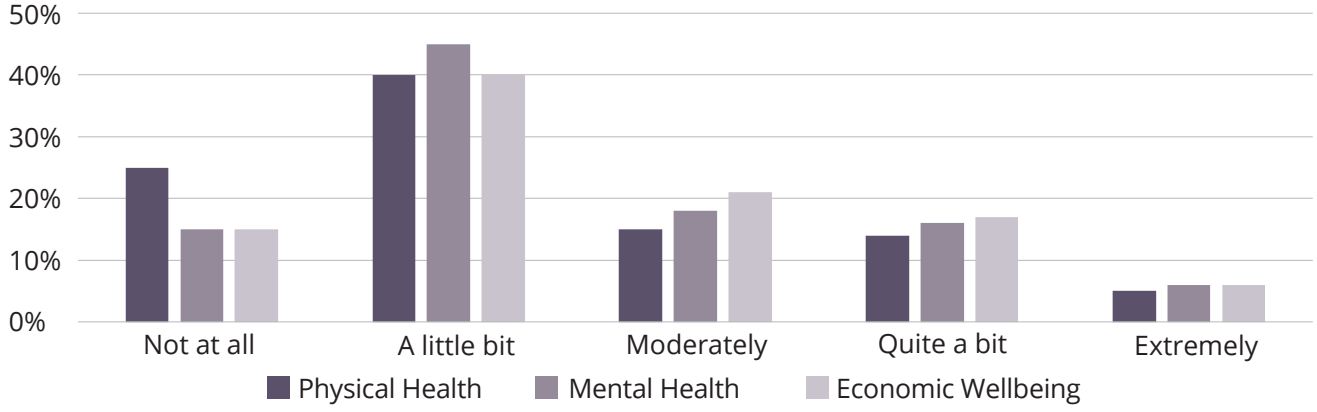
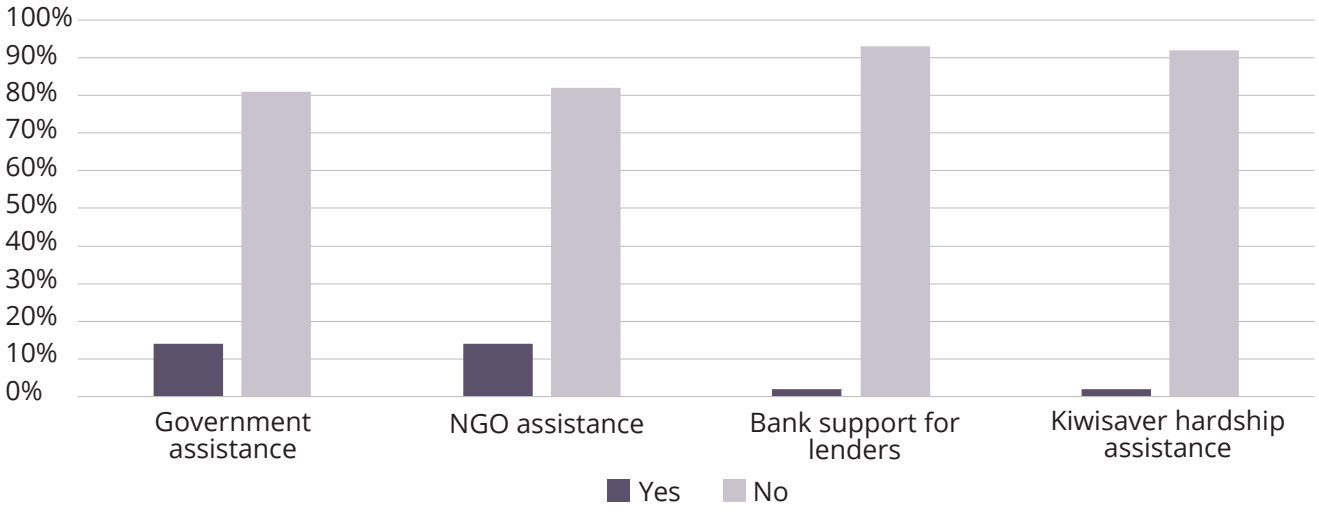


Figure 24. Types of Hardship Assistance Accessed



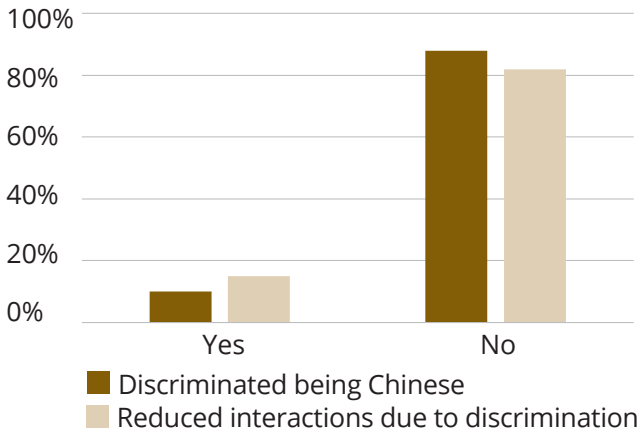
REPORTED DISCRIMINATION

EXPERIENCES OF DISCRIMINATION

A report from the Human Rights Commission on research conducted in August 2020 into experiences of racism and discrimination since the start of the COVID-19 outbreak in Aotearoa found that 54% of the n = 152 Chinese adults interviewed had experienced discrimination, and 67% had made a conscious effort to avoid situations where they may experience discrimination.

In the current sample of older Chinese immigrants 10% (n=116) of respondents reported having felt discriminated against due to being Chinese and 15% (n=178) experienced reduced interactions or activities due to concerns about discrimination.

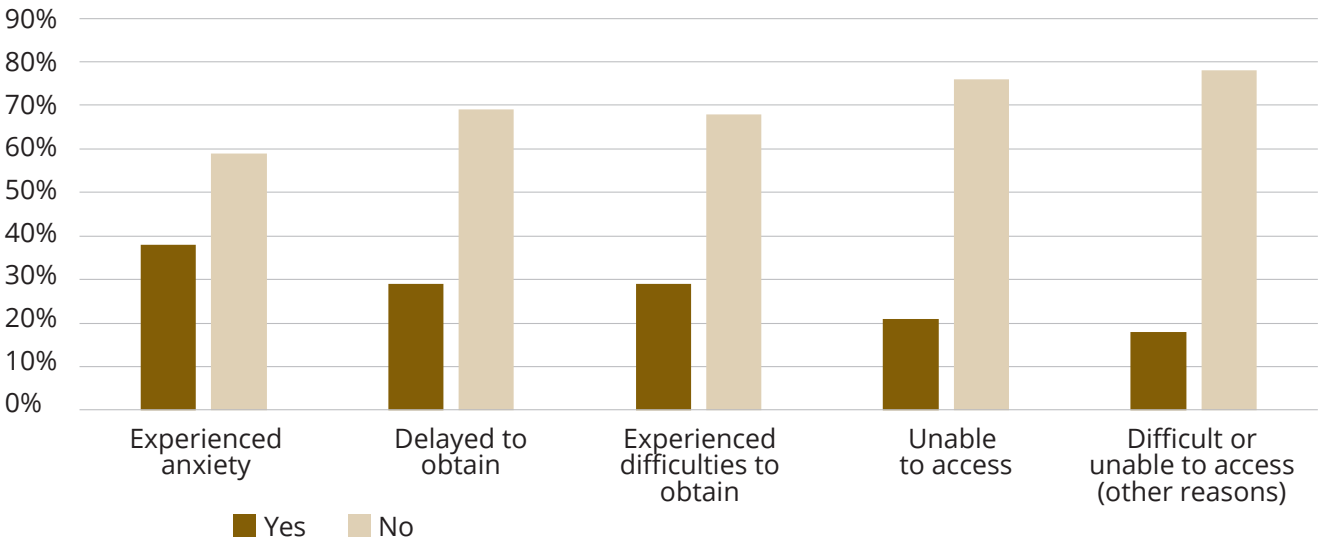
Figure 25. Reports of Discrimination and Reduced Interactions due to Discrimination



BARRIERS TO SERVICE USE

Due to concerns about a language barrier, 38% (n=445) experienced anxiety around obtaining needed health or social services, 30% (n=333) delayed obtaining health or social services, 30% (n=331) experienced difficulties in accessing health or social care services, 21% (n=242) were unable to access health or social care services, and 18% (n=207) experienced difficulties or were unable to access health and social care services due to other reasons.

Figure 25. Reported Effects of Langugage Barrier on Access to Health and Social Care Services



DISCRIMINATION AND WELLBEING

A total of 223 Chinese older adults (19% of respondents) reported feeling discriminated against due to being Chinese and/or reduced interactions and activities due to concerns about discrimination since the start of the COVID-19 pandemic. Analyses indicate that compared to other Chinese immigrants, this group reported higher current symptoms of loneliness (r = .22, p<.001), anxiety (r = .23, p<.001), and depression (r = .22, p<.001).

Having felt or avoided discrimination was also associated with a greater number of diagnosed chronic conditions (r = .08, p<.001), less frequent internet use (r = -.08, p<.001), lower adequacy of income in light of needs (r = -.12, p<.001) and poorer overall self-rated health (r = -.07, p<.001).

Table 1. Pearsons correlations (r) between wellbeing variables and feelings of discrimination.

Variables	1	2	3	4	5	6	7
1. Felt discriminated against	--						
2. Loneliness	.22**	--					
3. Anxiety	.23**	.38**	--				
4. Depression	.22**	.47**	.61**	--			
5. Chronic conditions	.08**	.17**	.25**	.23**	--		
6. Internet use	-.08**	-.14**	-.17**	-.15**	-.13**	--	
7. Income meeting needs	-.12**	-.22**	-.09**	-.16**	-.01	.11**	--
8. General health	-.07*	-.20**	-.30**	-.40**	-.24**	.17**	.15**

*p < .05, **p < .001

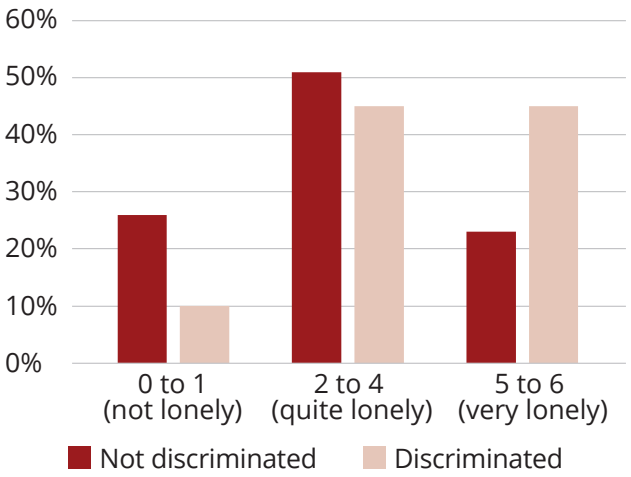
The following section illustrates relationships between having felt or avoided discrimination and overall health and mental wellbeing (loneliness, anxiety and depression). In general, those who reported discrimination were more likely to report poorer wellbeing.

There are also relationships shown between internet use, financial capability, and physical activity participation. These graphs compare those who reported discrimination to those who did not feel concern about being discriminated against.

LONELINESS

Around 90% (n=201) of the Chinese older adults who reported having felt discrimination, were more likely to report loneliness than those who did not (74%, n=679).

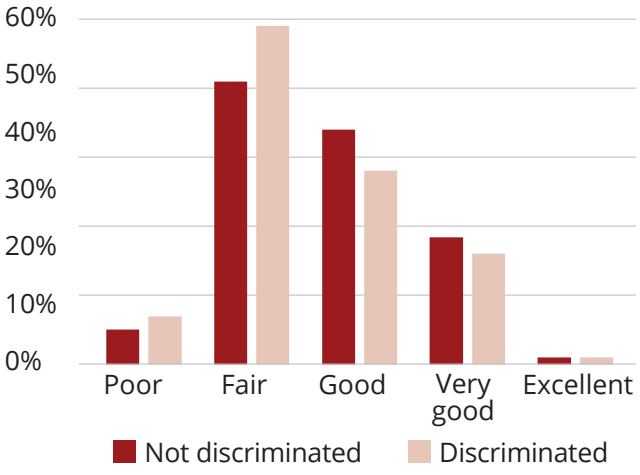
Figure 26. Loneliness by Discrimination



HEALTH

Chinese older adults who reported having felt discriminated were more likely to report poor to fair health (55%, n=122) compared to those who did not (45%, n=421).

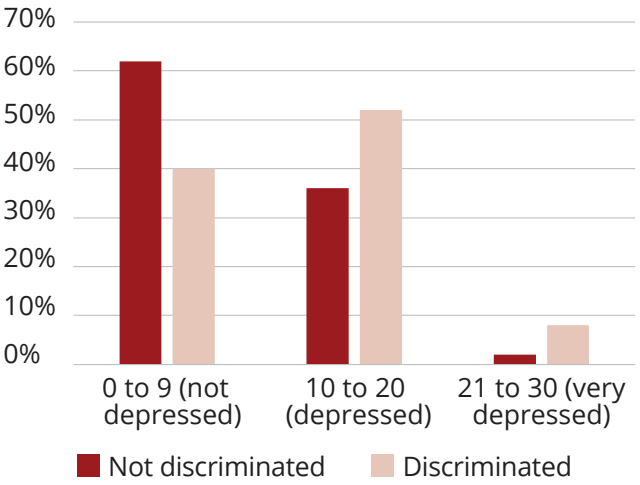
Figure 27. Health Status by Discrimination



DEPRESSION

Chinese older adults who reported having felt discrimination were more likely to report significant symptoms of depression (60%, n=134) compared to those who did not (38%, n=351).

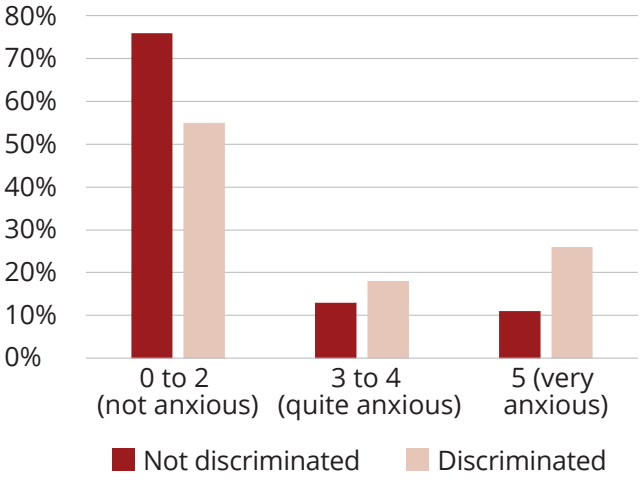
Figure 28. Depression by Discrimination



ANXIETY

Chinese older adults who reported having felt or avoided discrimination were more likely to experience significant symptoms of anxiety (45%, n=98) compared to those who did not (24%, n=516).

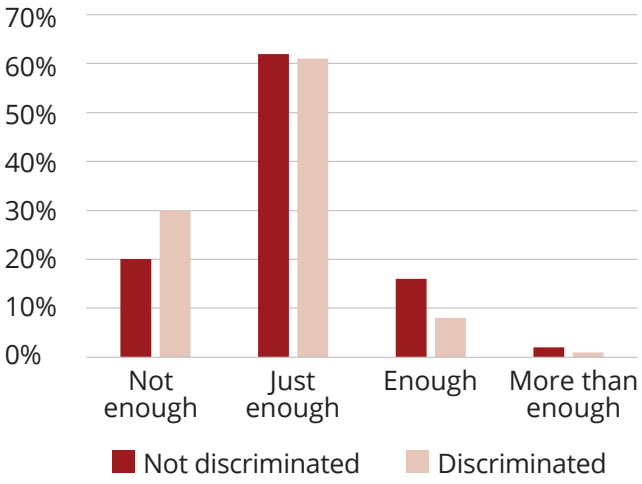
Figure 29. Anxiety by Discrimination



INCOME MEETING NEEDS

Chinese older people who felt discriminated were less likely to report their income to be enough to meet their daily needs (9%, n=19) than those who did not (18%, n=161).

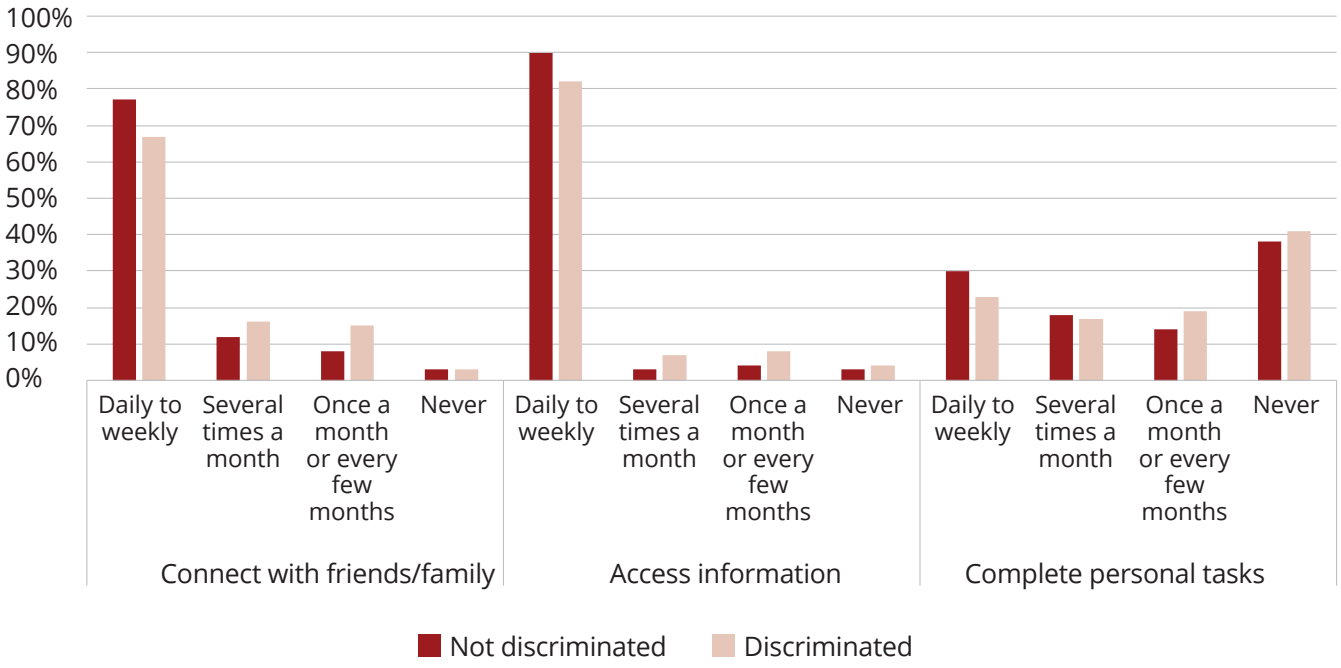
Figure 30. Income by Discrimination



INTERNET USE

Those who reported having felt or avoided discrimination were slightly but consistently less likely to report daily to weekly internet use across all purposes of internet use. This group displayed less daily/weekly use of the internet to connect with friends and family (67%, n=145), to access information (82%, n=177) and to complete personal tasks (23%, n=50) compared to those who had less concern (77%, n=694), (90%, n=814) and (30%, n=273) respectively.

Figure 31. Internet Use by Discrimination



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