Hindawi
Health & Social Care in the Community
Volume 2024, Article ID 5798242, 18 pages
https://doi.org/10.1155/2024/5798242

Research Article

Public Attitudes for Quality and Funding of Long-Term Care: Findings from an Australian Survey

Rachel Milte,[1] **Julie Ratcliffe**,[1] **Sheela Kumaran**,[1,2] **Claire Hutchinson**,[1] **Gang Chen**,[3] **Billingsley Kaambwa**,[4] **and Jyoti Khadka**[1]

[1]*Caring Futures Institute, Flinders University, GPO Box 2100, Adelaide 5001, SA, Australia*
[2]*School of Optometry and Vision Science, University of New South Wales, Sydney 2052, NSW, Australia*
[3]*Centre for Health Economics, Monash Business School, Monash University, Melbourne 3800, VIC, Australia*
[4]*College of Medicine and Public Health, Flinders University, GPO Box 2100, Adelaide 5001, SA, Australia*

Correspondence should be addressed to Rachel Milte; rachel.milte@flinders.edu.au

Received 4 October 2022; Revised 22 February 2024; Accepted 25 March 2024; Published 20 April 2024

Academic Editor: Tushar Singh

There has been growing interest in exploring factors that influence the success or otherwise of welfare policies in democratic countries, such as the interrelationships between the proposed policy and the context it will be introduced into, such as the sociodemographic characteristics of the population and the population's previous experience with welfare policies. However, there has been little exploration of factors that could influence general population support for long-term care for older people. The aim of this study was to investigate the general population's attitudes for determinants of high-quality aged care and different mechanisms for funding and any impact of individual characteristics on these. A representative sample of the Australian general population aged 18 years and over ($N = 10{,}315$, 52% female, 22% aged 65 years and over) drawn via quota sampling participated in the survey online. Participants were asked to rate the importance of a list of 10 determinants of quality care and their support for four models of funding, both using a five-point Likert scale. We identified consistently high expectations for long-term care services across the general population, especially among older people, females, those with a family member in care, and those living in rural or regional areas. In terms of how governments practically fund a high-quality long-term care system, we also identified broad support among the general population for both payment of a co-contribution towards the cost of care by older people using services and increased government funding for the system. Over 40% of participants said they would be willing to pay additional tax to improve access and quality of aged care services. While often neglected by governments in the past who assumed voter apathy on the topic, by comparison, our findings indicate that there is currently a strong appetite among the general population for improvements to the quality of care provided and that they are willing to consider changes to the funding model.

1. Introduction

With an industry worth more than $20 billion in Australia, £48 billion in the UK, and $175 billion in the USA, long-term care can be defined as the environmental support and care activities undertaken to ensure people with loss of function and capacity associated with ageing, poor health, frailty, or disability are able to maintain their wellbeing [1–3]. While long-term care may be required across the lifespan, older adults form the predominant users of long-term care [4]. Total public expenditure on long-term care accounted for 1.7% of gross domestic product (GDP) across OECD countries in 2013, and projections indicate that this share will need to double by 2060 to accommodate the growing number of older people living longer with increasing frailty and health conditions requiring care and support in their own homes or a residential care facility [5, 6]. The predominant basis of funding in many advanced economies for long-term care services, including in Australia, is from public funding. Income taxation of working-age people typically within the 18–65 years, where their engagement with the workforce is high, forms a primary source of public

funding [3, 7]. In Australia, the number of people accessing long-term care services has increased markedly during the last decade, with a 15% increase in people accessing residential services and a huge 142% increase in people using home care services [8]. However, continued adequate funding of the sector relies upon support from a range of working-age adults, who may not be utilising the sector themselves until decades into the future. Increases in taxation or levies to boost funding to the sector are being considered in countries such as the UK and Australia; however, the impact these may have on younger working people and the delicate social contract that holds democracies together is controversial [9].

Despite the critical role that long-term care plays in societies, there has been limited empirical investigation of general population support for the sector or of the individual or context-level factors that influence this.

Janus and Koslowski [10] evaluated the level of general public support for funding for aged care services across 25 countries and identified greater support for publicly funded formal services in countries with an already higher level of public expenditure on aged care services. Concepts from political science, such as policy-feedback theory, provide useful frameworks to consider how larger forces at a societal level can influence individual-level attitudes towards a policy, which then influences the level of ongoing support for a policy and its "stickiness" [11]. Put simply, policy-feedback theory posits that the way social policy is implemented will influence the level of support or otherwise among members of the general public for social policy in the future [12]. It arose from consistent data showing that the same policy, proposed in different countries, can have vastly different levels of public support despite those countries on the face of it having many similarities (e.g., being well-off OECD countries, with similar demographic profiles). Policy-feedback theory explains this as the historical experience of the citizens of those countries with other welfare support policies (such as healthcare, education, and unemployment support) influencing individual-level attitudes, which then (in democratic countries) influence popular support for current government policies, therefore accounting for these between-country differences. There are a range of supporting theories that further describe how policy-feedback theory acts on a more incremental level [13–15]. For example, studies have shown that the presence of universalism (i.e., provision of welfare support across the entire population, without means testing) in welfare policies increases support for the welfare state [11]. There are a number of potential explanations for this. One is that self-interest plays a role (i.e., I will be more interested in maintaining a program and look to elect governments that will support it if I perceive that I am benefiting from that program) [16], although this pattern is not always consistent [11, 17]. Universal programs have another advantage compared with more targeted programs. They also minimise the appearance of a welfare program of redistributing from the "rich" to the "poor," negating any questions about whether the "poor" in question is really "deserving" of the additional support [11]. The development of policy-feedback theory over the past decades has included investigation of the specificity of the effect (i.e., whether exposure to one welfare program will increase support for welfare programs overall) and the influence of contextual factors, for example, the interplay between expected gender norms in a society, exposure to unequally distributed and unpaid caring roles, and support for welfare policies overall [13, 18]. The overall generosity of the welfare program has been found to play less of a role in moderating support for welfare than the overall structure of the programs and how it is delivered [11, 18]. Studies have generally shown that support for welfare programs such as healthcare and pensions is high in developed democracies, as compared to unemployment insurance, which is more contentious, having the appearance of a more "targeted" program.

There has been relatively limited investigation of general population support for aged care policy with the exception of pensions for older age [18]. However, long-term care also forms an interesting case study for investigations of the extent of individual-level factors and how previous experience with a program influences support for the welfare state. In terms of support for funding mechanisms, in the UK there is evidence of heterogeneity of opinion with one study showing support for cosharing of costs between the government and the individual, while another study identified more variety in support, with up to 50% indicating the individual should cover the cost of their care [19, 20]. Both studies identified heterogeneity in attitudes within their samples, associated with sociodemographic characteristics of the individual such as gender, income, experiences of caregiving to family members, self-rated health, education, and occupation type. In Australia, Kaambwa et al. [21] identified that a large proportion of the general population were willing to pay for access to long-term care services at home (80%), while a smaller proportion were willing to pay for access to residential aged care (64%). Higher WTP values were associated with male gender, experience with the long-term care system, and ability to pay (i.e., income).

In terms of support for principles of a high-quality aged care system, Hajek et al. [22] found strong support among the German general population for foundational principles of personal independence in long-term care, such as freedom of choice, shared decision-making, safety, and autonomy. They found especially strong support among females, older people, and those with poorer self-rated health. Chen et al. [23] evaluated Australian general population preferences for six principles of high-quality aged care using DCE methodology. They too found heterogeneity of preferences within the sample using latent class analysis, identifying those with previous experience of aged care, female, older, and those born in Australia particularly valuing outcomes of care, such as being treated with respect and dignity, maintaining health and wellbeing, and being able to make your own decisions. However, the extent to which a wide range of sociodemographic characteristics are associated with attitudes towards a broad range of principles of quality care and funding mechanisms in the long-term care system has not been investigated to date in Australia or internationally. This study sought to investigate the attitudes

(as compared to the preferences) of the general population for the determinants of high-quality aged care and mechanisms for funding and investigate the impact (if any) of sociodemographic characteristics on these.

1.1. Typologies of Long-Term Care. Long-term care systems vary greatly across countries, often using different languages and terms to describe similar concepts, making cross-national comparisons more challenging. However, scholars have proposed typologies of systems that are useful [4]. In their typology, Ariaans categorises LTC systems using four criteria including (1) supply (referring to the total expenditure compared with the total GDP, the number of available beds per capita, and the proportion of older people in institutions), (2) public-private mix (referring to the share of private expenditure and whether benefits can be paid in cash to individuals), (3) access regulation (referring to the level of choice in service access, choice in service provider, and choice in how benefits are paid and whether the program is universal or has elements of means testing for access), and (4) performance (referring to reporting of indicators of quality of care. A number of OECD countries, including Australia, Denmark, Germany, Japan, Korea, the Netherlands, and New Zealand, have elements of universal coverage in their long-term care systems and do not include means testing (i.e., assessment of an individual's assets and resources) as a condition of entry into the program [24]. Other countries, such as England, Canada, and the USA, have means testing for access to all or some of the programs (e.g., to access formal care services where an individual's care needs (i.e., physical or health-related need for assistance with an activity of daily living) are determined to be low). Cost sharing (i.e., significant financial contributions from recipients for their formal care services) is utilised in a number of countries, including Australia, Canada, England, Japan, Korea, the Netherlands, New Zealand, Poland, and Singapore [25].

1.2. The Australian Long-Term Care System. In Australia, the long-term care system is relatively complex, comprising funding and regulation provided by the Commonwealth Government, while the care is delivered predominantly by either not-for-profit providers or private providers external to the government [24, 26]. Care can be provided through several programs, including care provided at home (through the Commonwealth Home Support Program and Home Care Packages Program) to residential aged care (where older people live in a purpose-built facility, which is staffed 24 hours a day and provides support with activities of daily living and nursing care). Care across the programs in theory can include a combination of social support, transport assistance, help with domestic chores, activities of daily living, personal care, home modifications, nursing care, allied health services, and assistance with shopping and meals. While the number of people receiving care at home has been growing over the past decade, the majority of government spending (around 60%) is still allocated to residential aged care [1].

The long-term care system in Australia was recently the subject of a Royal Commission, and in common with many other high-income countries, elder abuse and neglect and the poor quality of care and services provided in long-term care settings have been highlighted [26–29]. Structural problems magnified by the pandemic include inadequate staff training, casualisation and insecure work environments, and differences in access to essential equipment in the long-term care sector as compared to the health sector [30, 31]. Almost 90% of residential aged care facilities in Australia have been assessed as a poor or very poor standard [32]. The funding of the system and its influences on the care provided and outcomes for older adults have come under significant scrutiny recently [6]. Funding is provided not based on the actual care provided, but rather on an assessment of the level of deficit in an older person's functional abilities and activities of daily living [33]. This creates perverse incentives in a system that rewards overclaiming and underservicing of clients. Additionally, there is no incentive to rehabilitate an older person's function—this would likely result in a reduction in funding to the organisation [33]. Among other concerns, poorly planned regulation and a focus on constraining increasing costs have resulted in an undertrained, undervalued, and underpaid workforce in long-term care [31, 33]. Less than 20% of workers in residential aged care (where older people with some of the most complex needs are cared for) are registered nurses [34]. Instead, the majority of care is undertaken by personal care attendants, who, while they may be dedicated, have low levels of formal training [31]. Historically, there have been no minimum staffing levels for the sector and more than half of facilities have unacceptable staffing levels [35]. Australians are likely much more aware of the quality of the aged care system and challenges facing it than ever before following media reports of negligent care and the Royal Commission, and it has even started to appear as an issue in elections [36]. However, meaningful reform in the sector has remained elusive in Australia and elsewhere [31, 37]. There are a number of barriers to effective reform. Broadly, ageing is still associated with stigma in most developed democracies, and older people requiring long-term care have significant physical, mental, and social challenges that limit their ability to get a public platform to voice their concerns [31, 38]. By comparison, aged care in Australia and elsewhere is increasingly an industry, with the mobilisation and lobbying power associated [38, 39]. Providers (especially the growing number of private providers) have an imperative to constrain costs and protect their bottom line. Suggested reforms such as increasing worker pay to attract higher quality workers, increasing the number of staff providing direct care, or improving food will likely cost more money [37, 40]. Any changes to requirements for copayment or how assets are incorporated into means testing need to be implemented within a context where residents are already receiving care under the previous system. How should this be handled? Should they stay on their current system? There are a number of challenges to implementing change

in the currently running system, and it often seems easier to let things continue as they are even if improvements could be made.

2. Materials and Methods

2.1. Theoretical Framework. Providing complex services such as long-term care systems in resource-constrained environments requires governments, service providers, and older people to make decisions about what services are needed and when and how they should be delivered. There is a large literature that describes models of decision-making from disciplines such as psychology, mathematics, and economics [41]. The concept of "attitudes" is grounded in social psychology and refers to the judgement of a particular entity as positive or negative [42]. It is often measured through simple rating questions, for example, asking participants to use a Likert scale to indicate the extent to which they consider a service good, very good, poor, very poor, or somewhere in between. However, attitudes provide little information about the individual components of a good or service that are most valuable or preferred by consumers.

Other decision-making models provide approaches that account for this, such as the concept of "preferences" found in economic theory [42]. The basis of preferences in economics hinges on the understanding that a good or service has a value to an individual comprised of its component parts, described as its "utility" [43]. Economics assumes that individuals move through their lives making decisions to maximise this "utility," i.e., the value they get from the goods and services they consume [44, 45]. Preferences can be measured through methods assuming a monetary value for the utility (i.e., through willingness to pay or willingness to accept methods) or without assuming a monetary value (e.g., through discrete choice analysis or conjoint analysis methods). A disadvantage of preferences, however, is that most methods usually assume individuals have perfect information about the available goods and services and that they make decisions in a completely rational way. There are many situations, including making decisions about aged care, where these assumptions do not hold. Attitudes and preferences offer useful information about decision-making, but both have their limitations. Given the valuable but as yet imperfect models available to describe consumer decision-making, a potentially robust approach would be to measure both preferences and attitudes to provide us more confidence in our findings. Preferences of the general population for six key aged care quality criteria were recently investigated via DCE [23] and WTP methodology [21]. This study will focus on measuring general population expectations for long-term care quality and funding using attitudinal approaches.

This paper reports the findings from a subset of questions embedded within a larger survey to assess general public attitudes towards the determinants of high-quality aged care, their preferences for how care should be provided and funded, and their willingness to pay for quality aged care in Australia [46]. The survey contained four main sections: Section A comprised a list of potential characteristics of a quality aged care service, and participants were asked to rate the importance of this characteristic using a Likert scale; Section B comprised a discrete choice experiment, which aimed to understand the preferences of participants for different aspects of aged care quality; Section C of the questionnaire comprised questions about the willingness of participants to pay to receive access to hypothetical aged care services at home or in residential aged care settings in the future, and attitudes to the level of funding and how it is provided to the sector; and Section D asked sociodemographic questions, such as their age and gender, income, and level of experience with the aged care sector. A brief report of the responses for the entire set of study questions for the sample has been provided previously [47]. However, this prior report did not include a detailed analysis of the influence of sociodemographic variables on responses to the survey, which this manuscript describes. Therefore, the aims of this study are to firstly investigate the attitudes of the Australian general population towards determinants of high-quality aged care, secondly to investigate their level of support of different methods of funding for aged care, and thirdly to examine the extent to which sociodemographic characteristics of the individual are related to these attitudes.

2.2. Survey Development. This analysis will focus on questions from Section A (i.e., attitudes to determinants of quality aged care) to Section D (attitudes to levels and methods of funding for the aged care system) of the survey. The survey asked participants to first use a five-point Likert scale ranging from "not important" to "very important" to indicate how important they felt different determinants of aged care quality were for the long-term aged care setting [47]. Secondly, the survey asked participants to indicate the extent to which they would agree with providing additional funding for long-term aged care on a five-point Likert scale ranging from "strongly disagree" to "strongly agree" [47]. Statements were developed through a multistep approach. Firstly, a comprehensive literature review (including grey and peer-reviewed literature) was undertaken to identify and synthesize the aspects of quality of care in long-term care settings [48]. The findings of this review were used to develop key questions and statements regarding the quality of care in long-term care settings and potential funding mechanisms by the research team. These key questions were then reviewed by the Project Advisory Group (comprising consumers, long-term care provider representatives, and state and federal government representatives), who made suggestions regarding the comprehensiveness of identified concepts, missing key concepts, wording, and phraseology. These questions were then piloted via a face-to-face interview with an adult general public sample (aged 18 to 70 years, $N = 12$) purposefully selected from various socioeconomic backgrounds. Minor revisions to the survey questions to improve phraseology and question readability were made. The final statements are included in Supplementary Table A.1 for reference. Participants were also asked a range of questions about their sociodemographic characteristics. Ethics approval for the project was obtained from

the Flinders University Social and Behavioural Research Ethics Committee (Project No. 8378). Participants were provided with detailed information regarding the study and its risks prior to undertaking the survey. The completion of the online survey implied consent for the research study.

2.2.1. Participants. The survey was administered online via an online panel network based in Australia. Panel members who were aged 18 years and over, residing in Australia, currently not using long-term care services, and able to read and respond in English were invited to take part in the survey (Supplementary Table A.1). To ensure that the survey views were representative of members of the general population living in Australia, demographic quotas were applied to ensure the final sample was representative of 2018 population estimates based on age group, state or territory of residence, and gender. The survey was undertaken between September 2019 and October 2019. A total of 15,798 members of the general public accessed the survey, and 10,315 (65%) people completed the survey and were included in the data analysis.

2.3. Outcome Variables. In total, 10 aged care quality and 4 funding attitudinal statements were presented (see Supplementary Table A.1). Each of the 10 aged care quality statements was evaluated on a 5-point ordinal scale of importance ranging from "not important" to "very important." Due to low utilisation, the two lowest categories were combined to form a 4-point ordinal scale: 1 = not/slightly important, 2 = moderately important, 3 = important, and 4 = very important.

The four funding statements were as follows: statement 1, "The government should provide more funding for aged care"; statement 2, "I would be willing to pay more tax to ensure Australians are able to access aged care services when they need them"; statement 3, "Australians should contribute towards the funding for the aged care services that they receive in line with their ability to pay"; and statement 4, "I would be willing to pay more tax to improve the aged care services being provided to older Australians" [47]. Each funding attitudinal statement was rated on a 5-point agreement ordinal scale. Similarly, due to low utilisation, the two lowest and two highest categories were combined to form a 3-point ordinal scale: 1 = strongly disagree/disagree, 2 = neither agree nor disagree, and 3 = agree/strongly agree.

2.4. Covariates. The covariates included in the analysis were based on the demographic characteristics collected from survey respondents. Covariates were age (18–39 years, 40–64 years, and >64 years), gender (0 = female and 1 = male), country of birth (0 = not born in Australia and 1 = born in Australia), region (0 = regional area, i.e., country or rural area, and 1 = metropolitan area, i.e., large urban centre or capital city), education (primary or secondary, high school, Technical and Further Education (TAFE) and vocational training, undergraduate, and postgraduate), employment (unemployed, part-time or full-time employed, students, and retired), income (<$30,000, $30,000–$59,999, $60,000–99,999, and >$100,000), currently paying tax (0 = no and 1 = yes), and family member or close friend receiving aged care (0 = no and 1 = yes). Those participants with responses of "other" to the employment variable ($n = 659$) and "prefer not to say" to the income variable ($n = 951$) were excluded from the relevant analyses as these variables were included as a covariate.

2.5. Data Analysis. Analyses were conducted using STATA version 16.0. Participants who filled one of the following criteria were identified during data cleaning and excluded from the analyses ($n = 22$): (1) lacked variation in their responses to questions (i.e., "straight-lining"), (2) undertook the survey too quickly (i.e., they were more than 2 standard deviations lower in their response time than the median duration), and (3) provided ambiguous text as a response in the survey. Descriptive and summary statistics were calculated and presented for the sociodemographic variables and attitudinal statements and expressed as frequencies, percentages, mean ± standard deviation, and median with intraquartile range (IQR). Responses to the attitudinal statements were collated and presented for the total sample and participant subgroups stratified by three age groups (18–39, 40–64, and ≥ 65 years). Pearson's chi-squared test of association was used to test for the association between age groups and responses to attitudinal statements [49].

As all aged care quality and funding attitudinal statements had ordered categories, multiple regression analysis was conducted using ordinal logistic regression analysis for each statement to investigate which covariates influence general public attitudes towards aged care quality and attitudes towards preferences for funding. Each of the 14 regression models (reflective of each individual statement presented) included covariates that were associated with dependent variables at a significant level of ≤0.20 on univariate analyses [50]. Odds ratios with 95% confidence intervals were estimated and reported. The assumptions of multicollinearity and proportional odds (i.e., the relationship between each pair of outcome groups is the same using the Brant test) were tested to assess the validity of each of the models separately. A 2-sided alpha of ≤0.05 was considered statistically significant [49].

3. Results

3.1. Descriptive Statistics. Table 1 presents the demographic characteristics of the sample according to age group. A greater proportion of participants in the younger age group lived in metropolitan regions as compared to rural or regional centres. In addition, education level decreases across the sample with age, with over a third of the participants aged 18 to 39 years indicating an undergraduate education level (37.2%) as compared to only 19% in those aged 65 years and over. Current taxpayers comprised 63.6% of the total sample, and 24% indicated they had some experience with the long-term care system through a family member or close friend receiving services. The sociodemographic

Table 1: Sociodemographic characteristics by age group.

Sociodemographic variable ($n = 10,315$)		18–39 years	40–64 years	65 years and over
Gender	Male	1748 (44.3%)	1826 (44.3%)	1384 (61.6%)
	Female	2200 (55.7%)	2294 (55.7%)	863 (38.4%)
Type of dwelling	Separate house (detached)	23.18 (58.7%)	3040 (73.8%)	1689 (75.2%)
	Semidetached/duplex	137 (3.5%)	132 (3.2%)	93 (4.1%)
	Unit/apartment	1112 (28.2%)	679 (16.5%)	278 (12.4%)
	Row/terrace	17 (0.4%)	23 (0.6%)	6 (0.3%)
	Townhouse/villa	292 (7.4%)	214 (5.2%)	146 (6.5%)
	Other	72 (1.8%)	32 (0.8%)	35 (1.6%)
State	NSW	1431 (36.2%)	1307 (31.7%)	696 (31%)
	VIC	1084 (27.5%)	1061 (25.8%)	499 (22.2%)
	QLD	588 (14.9%)	728 (17.7%)	458 (20.4%)
	WA	395 (10%)	384 (9.3%)	224 (10%)
	SA	235 (6%)	359 (8.7%)	236 (10.5%)
	TAS	82 (2.1%)	148 (3.6%)	72 (3.2%)
	ACT	87 (2.2%)	81 (2%)	43 (1.9%)
	NT	46 (1.2%)	52 (1.3%)	19 (0.8%)
Region	Metro	2798 (70.9%)	2514 (61.0%)	1106 (49.2%)
	Regional	1150 (29.1%)	1606 (39%)	1141 (50.8%)
Living company	On your own	678 (17.2%)	913 (22.2%)	641 (28.5%)
	With spouse/partner	1400 (35.5%)	1708 (41.5%)	1447 (64.4%)
	With family	1578 (40%)	1379 (33.5%)	123 (5.5%)
	With others—not relatives	292 (7.4%)	120 (2.9%)	36 (1.6%)
Education	Primary school	17 (0.4%)	13 (0.3%)	31 (1.4%)
	Some secondary school	175 (4.4%)	430 (10.4%)	365 (16.2%)
	Completed high school	644 (16.3%)	654 (15.9%)	439 (19.5%)
	Some additional training (e.g., TAFE and apprenticeship)	928 (23.5%)	1457 (35.4%)	735 (32.7%)
	Undergraduate university	1467 (37.2%)	1009 (24.5%)	426 (19%)
	Postgraduate university	717 (18.2%)	557 (13.5%)	251 (11.2%)
Country of birth	Australia	2821 (71.5%)	3060 (74.3%)	1543 (68.7%)
	New Zealand	69 (1.7%)	109 (2.6%)	63 (2.8%)
	Europe	93 (2.4%)	318 (7.7%)	345 (15.4%)
	Other Asia Pacific	444 (11.2%)	239 (5.8%)	36 (1.6%)
	Africa	23 (0.6%)	36 (0.9%)	16 (0.7%)
	Other	498 (12.6%)	358 (8.7%)	244 (10.9%)
Employment	Employed full-time	1957 (49.6%)	1734 (42.1%)	96 (4.3%)
	Employed part-time	909 (23%)	893 (21.7%)	183 (8.1%)
	Undergraduate or postgraduate university student	430 (10.9%)	25 (0.6%)	4 (0.2%)
	Retired	16 (0.4%)	519 (12.6%)	1867 (83.1%)
	Unemployed	482 (12.2%)	524 (12.7%)	20 (0.9%)
	Other	154 (3.9%)	425 (10.3%)	77 (3.4%)
Income	<$30000	607 (15.4%)	600 (14.6%)	563 (25.1%)
	$30000–$59999	734 (18.6%)	878 (21.3%)	875 (38.9%)
	$60000–$99999	923 (23.4%)	955 (23.2%)	406 (18.1%)
	>$100000	1252 (31.7%)	1305 (31.7%)	191 (8.5%)
Family member receiving care	Yes	977 (24.7%)	899 (21.8%)	347 (15.4%)
	No	2971 (75.3%)	3221 (78.2%)	1900 (84.6%)

characteristics of the samples who indicated they were paying tax and those who indicated they were not are included in Supplementary Table A.2.

The responses to the attitudinal statements by age group for statements 1–5 are presented in Figure 1 and for statements 6–10 are presented in Figure 2. When considering the findings for the total sample, the majority indicated that all statements were either important or very important for ensuring the quality of long-term care. Respect and dignity were of the utmost importance to participants: the vast majority of participants (80%) considered it very important that "Older people should be treated with respect and dignity." This was closely followed by the statements regarding safety ("Older people should feel safe and comfortable receiving aged care services whether in a nursing home or their own home") and staff having appropriate skills and training ("Aged Care staff should have the skills and training needed to provide appropriate care and support"), with 77% of participants considering these aspects very important.

The vast majority (70% or more) of participants across the three age groups identified all of the attitudinal statements as either very important or important. There was a significant association between age and responses to all the attitudinal statements ($p < 0.001$), with younger subgroups less likely to indicate that the statements were very important as compared to older subgroups. The statement "Older people should be treated with respect and dignity" was considered very important by 71.9% of those aged 18–39 years as compared to 83.7% of those aged 40–64 years and 87.9% of those aged 65 and above. The statement "Aged Care staff should have the skills and training needed to provide appropriate care and support" was considered important by 68.7% of those aged 18–39 years, 79.8% of those aged 40–64 years, and 86.6% of those aged 65 years and above.

The responses to the funding statements are presented in Table 2. The majority of survey respondents either strongly agreed (53.0%) or agreed (34.6%) that "The Government should provide more funding for aged care" and that "Australians should contribute towards the funding for the aged care services they receive in line with their ability to pay" (22.1% strongly agreed and 46.1% agreed). In addition, regarding their preferences for funding, around one-third agreed that they "would be willing to pay more tax to ensure Australians are able to access aged care services when they need them" and "to improve the quality of the aged care services being provided to older Australians." There were significant differences in responses to all the funding statements across the age groups, with those aged 65 years and above more likely to strongly agree that "The government should provide more funding for aged care" (58.2%), as compared to those aged 18–39 years (45.0%). Those aged 65 years and above were also more likely to agree that "Australians should contribute towards the funding for aged care services that they receive in line with their ability to pay" (52.3%) as compared to those aged 18–39 years (44.3%). The reverse was true for the two statements regarding whether the respondent would be willing to pay more tax to (1) "ensure Australians are able to access aged care services when they need them" and (2) "improve the quality of the aged care services being provided to older Australians," with those aged between 18 and 39 years more likely to agree with the statements than those aged 65 years and over.

3.2. Ordinal Regression Results

3.2.1. General Public Attitudes towards Aged Care Quality. Independent variables that had no association with the dependent variables ($p > 0.20$) on univariate analyses were excluded from the final models [50]. The variables excluded were the level of income and whether survey respondents had a family member currently receiving care for the majority of the attitudinal statements. Whether a survey respondent was born in Australia was excluded from the statement "Older people should be treated with respect and dignity." Older respondents, specifically females, were more likely to consider all 10 statements as having higher importance than younger individuals and males. The odds ratio for those aged 65 years and above considering the statement as very important as compared to those aged 18–39 years and 40–64 years was highest for the statement "Aged Care Staff should have the skills and training needed to provide appropriate care and support" (OR = 15.70) followed by the statements "Older people should be treated with respect and dignity" (OR = 9.47) and "Older people should feel safe and comfortable receiving aged care services whether in a nursing home or in their own home" (OR = 9.40) given that all other variables in the model were held constant (Tables 3 and 4).

Having a country of birth as Australia was a positive and statistically significant predictor only for 3 statements: "Aged Care Staff should have the skills and training needed to provide appropriate care and support," "Older people and their families should be supported to raise any concerns they have with the aged care service they are receiving from organisation(s) providing their care," and "Older people should be supported to maintain their social relationships and connections with the community." Those living in regional areas were more likely to consider all the statements very important than those in metro areas (however, this was not statistically significant for 2 statements: statement 3, "Older people and their families should be supported to raise any concerns they have with the aged care service they are receiving from organisation(s) providing their care," and statement 10, "Older people should have a trusting and supportive relationship with the staff providing their care").

Those with a family member currently accessing aged care services were more likely to consider that "Older people should be supported to maintain their social relationships and connections with the community" (OR = 1.23) and "The identity, culture and personal history of the older person should be known and valued by staff" (OR = 1.22) as very important to defining quality of care in long-term care service provision relative to those who did not have prior experience holding all other variables in the model constant. People with higher education, employment status, or higher

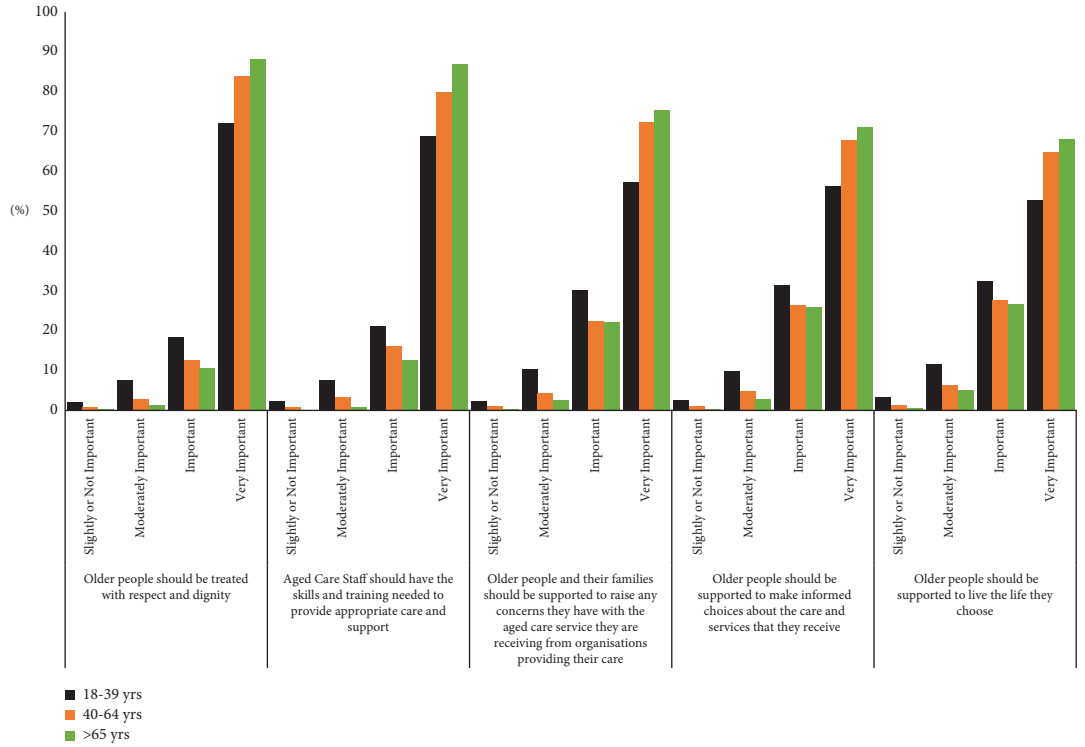

Figure 1: Responses to the attitudinal statements 1 to 5 by age group.

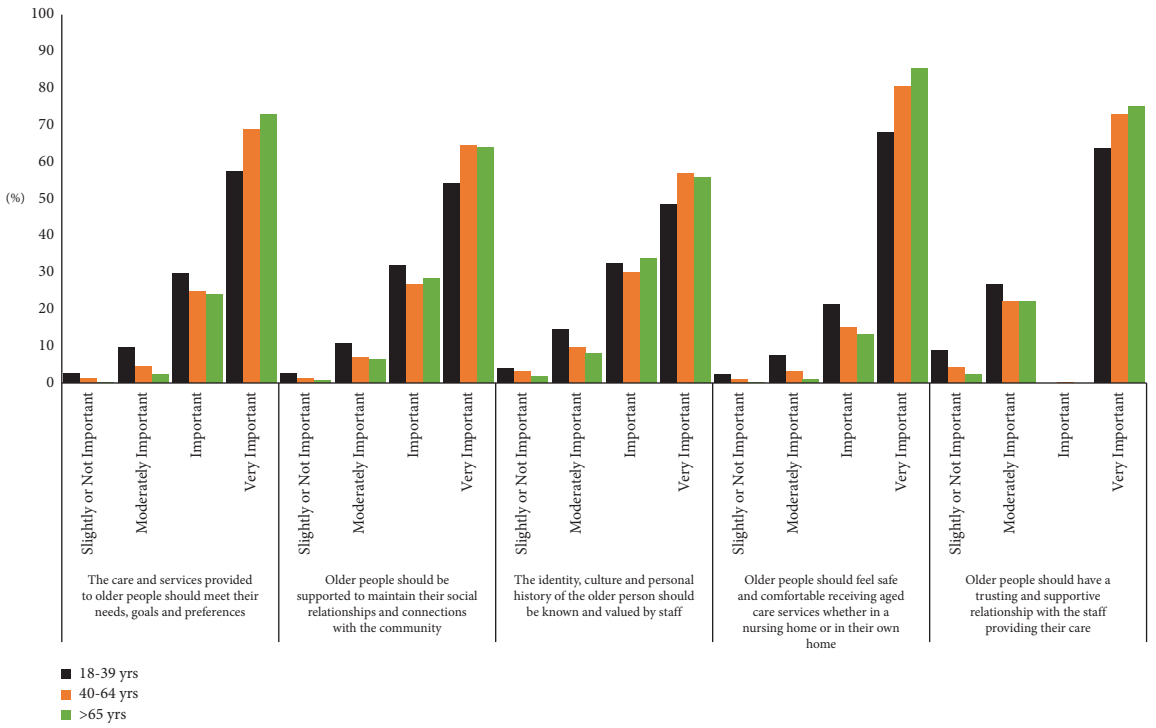

Figure 2: Responses to the attitudinal statements 6 to 10 by age group.

income were more likely to consider all the statements important or very important, but these trends did not reach statistical significance (Table 2).

3.2.2. General Public Attitudes for Aged Care Funding. Independent variables that had no association with the dependent variables ($p > 0.20$) on univariate analyses were

Table 2: Responses to funding statements for the total sample and by age group.

Attitude statement	Responses	Entire sample *N* (%)	18–39 years *N* (%)	40–64 years *N* (%)	≥65 years *N* (%)	Chi-square
The government should provide more funding for aged care	Disagree and strongly disagree	218 (2.1%)	100 (2.5%)	88 (2.1%)	30 (1.3%)	179.568 (0.000)
	Neither agree nor disagree	1061 (10.3%)	513 (13.0%)	367 (8.9%)	181 (8.1%)	
	Agree	3567 (34.6%)	1559 (39.5%)	1280 (31.1%)	728 (32.4%)	
	Strongly agree	5469 (53.0%)	1776 (45.0%)	2385 (57.9%)	1308 (58.2%)	
I would be willing to pay more tax to ensure Australians are able to access aged care services when they need them	Disagree and strongly disagree	1721 (16.6%)	634 (16.1%)	728 (17.7%)	359 (16.0%)	72.828 (0.000)
	Neither agree nor disagree	3538 (34.3%)	1245 (31.5%)	1413 (33.5%)	914 (40.7%)	
	Agree	3523 (34.2%)	1448 (36.7%)	1363 (33.1%)	712 (31.7%)	
	Strongly agree	1533 (14.9%)	621 (15.7%)	650 (15.8%)	262 (11.7%)	
Australians should contribute towards the funding for the aged care services that they receive in line with their ability to pay	Disagree and strongly disagree	844 (8.2%)	314 (8.0%)	374 (9.1%)	156 (6.9%)	71.308 (0.000)
	Neither agree nor disagree	2443 (23.7%)	1043 (26.4%)	982 (23.8%)	418 (18.6%)	
	Agree	4753 (46.1%)	1749 (44.3%)	1829 (44.4%)	1175 (52.3%)	
	Strongly agree	2275 (22.1%)	842 (21.3%)	935 (22.7%)	498 (22.2%)	
I would be willing to pay more tax to improve the quality of the aged care services being provided to older Australians	Disagree and strongly disagree	1681 (16.3%)	614 (15.6%)	725 (17.6%)	342 (15.2%)	89.363 (0.000)
	Neither agree nor disagree	3477 (33.7%)	1212 (30.7%)	1343 (32.6%)	922 (41.0%)	
	Agree	3578 (34.7%)	1478 (37.4%)	1391 (33.8%)	709 (31.6%)	
	Strongly agree	1579 (15.3%)	644 (16.3%)	661 (16.0%)	274 (12.2%)	

Table 3: Regression modelling of sociodemographic determinants of support for attitudinal statements 1 to 5.

Variables	Q1: Older people should be treated with respect and dignity			Q2: Aged care staff should have the skills and training needed to provide appropriate care and support			Q3: Older people and their families should be supported to raise any concerns they have with the aged care service they are receiving from organisation(s) providing their care			Q4: Older people should be supported to make informed choices about the care and services that they receive			Q5: Older people should be supported to live the life they choose		
	OR	95% CI		OR	95% CI		OR	95% CI		OR	95% CI		OR	95% CI	
Age (40–64)	2.85***	2.30	3.53	2.53***	2.07	3.09	2.44***	2.04	2.92	2.13***	1.79	2.54	1.89***	1.60	2.23
Age (≥65)	9.47***	5.70	15.74	15.70***	8.74	28.21	6.03***	4.04	9.00	4.76***	3.24	7.01	3.07***	2.20	4.28
Gender (male)	0.48***	0.40	0.57	0.46***	0.39	0.55	0.42***	0.36	0.50	0.50***	0.43	0.58	0.41***	0.35	0.48
Born in Australia (yes)	—			1.26*	1.04	1.53	1.29**	1.09	1.52	1.15	0.98	1.36	1.12	0.95	1.30
Region (metro)	0.77*	0.63	0.94	0.80*	0.65	0.97	0.86	0.72	1.02	0.77**	0.64	0.91	0.81**	0.69	0.95
Education (high school)	0.92	0.62	1.35	1.08	0.74	1.58	0.85	0.60	1.19	0.86	0.62	1.19	0.77	0.55	1.08
Education (additional training)	1.31	0.90	1.91	1.46*	1.02	2.10	1.15	0.83	1.59	1.30	0.95	1.79	0.93	0.67	1.28
Education (undergraduate)	1.02	0.71	1.48	1.37	0.95	1.97	0.87	0.63	1.21	1.00	0.73	1.37	0.62**	0.45	0.85
Education (postgraduate)	1.11	0.74	1.65	1.23	0.84	1.81	1.07	0.75	1.52	1.08	0.77	1.51	0.66*	0.47	0.93
Employment (employed)	1.13	0.85	1.50	0.99	0.75	1.31	1.14	0.89	1.46	1.03	0.80	1.32	1.14	0.88	1.47
Employment (university student)	1.46	0.94	2.26	1.28	0.84	1.97	1.29	0.89	1.88	1.36	0.92	2.01	1.00	0.69	1.45
Employed (retired)	0.88	0.55	1.39	0.95	0.59	1.52	1.02	0.68	1.51	1.03	0.70	1.52	1.09	0.76	1.56
Income ($30,000–$59,999)	—			—			—			—			1.00	0.80	1.25
Income ($60,000–$99,999)	—			—			—			—			1.07	0.85	1.35
Income (≥$100,000)	—			—			—			—			1.08	0.86	1.37
Family member receiving care (yes)	—			—			1.19	0.98	1.45	—			—		
N	9,659			9,659			9,659			9,659			8,705		
Log-likelihood	−2,237.50			−2,300.85			−2,856.40			−2,923.38			−3,186.83		
Pseudo-R-squared	0.0658			0.0762			0.0639			0.0512			0.0511		

Reference categories: age (18–39), gender (female), born in Australia (no), region (regional), education (primary or secondary school), employment (unemployed), income (<30,000), and family member receiving care (no). * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$—variable not included in the final model.

Table 4: Regression modelling of sociodemographic determinants of support for attitudinal statements 6 to 10.

Variables	Q6: The care and services provided to older people should meet their needs, goals and preferences			Q7: Older people should be supported to maintain their social relationships and connections with the community			Q8: The identity, culture and personal history of the older person should be known and valued by staff			Q9: Older people should feel safe and comfortable receiving aged care services whether in a nursing home or in their own home			Q10: Older people should have a trusting and supportive relationship with the staff providing their care		
	OR	95% CI		OR	95% CI		OR	95% CI		OR	95% CI		OR	95% CI	
Age (40–64)	2.23***	1.87	2.66	1.85***	1.54	2.17	1.57***	1.37	1.79	2.59***	2.11	3.18	2.10***	1.74	2.52
Age (≥64)	5.42***	3.60	8.17	3.01***	2.24	4.07	2.57***	1.98	3.33	9.40***	5.38	16.40	4.88***	3.20	7.42
Gender (male)	0.46***	0.39	0.54	0.42***	0.36	0.48	0.46***	0.41	0.52	0.48***	0.40	0.57	0.47***	0.40	0.56
Born in Australia (yes)	1.11	0.94	1.31	1.18*	1.01	1.36	1.05	0.92	1.20	1.11	0.92	1.35	1.10	0.92	1.31
Region (metro)	0.82*	0.69	0.98	0.84*	0.72	0.97	0.86*	0.76	0.98	0.75**	0.61	0.92	0.84	0.70	1.01
Education (high school)	0.75	0.52	1.07	0.83	0.62	1.09	0.74*	0.58	0.96	0.97	0.66	1.43	0.85	0.59	1.20
Education (additional training)	0.99	0.70	1.39	1.06	0.81	1.39	0.90	0.71	1.15	1.38	0.95	2.01	1.16	0.83	1.64
Education (undergraduate)	0.78	0.56	1.10	1.00	0.76	1.31	0.80	0.63	1.02	1.12	0.77	1.61	0.90	0.64	1.26
Education (postgraduate)	0.82	0.57	1.18	0.99	0.74	1.34	0.81	0.62	1.05	1.27	0.85	1.89	0.94	0.65	1.36
Employment (employed)	1.06	0.83	1.36	1.11	0.89	1.39	1.16	0.95	1.40	1.02	0.77	1.35	1.22	0.95	1.57
Employment (university student)	1.23	0.84	1.79	1.36	0.94	1.96	1.25	0.92	1.69	1.54	0.99	2.40	1.36	0.92	2.02
Employed (retired)	1.14	0.76	1.71	0.80	0.58	1.10	1.02	0.77	1.35	1.29	0.78	2.12	1.25	0.82	1.89
Family member receiving care (yes)	—			1.23*	1.03	1.46	1.22**	1.06	1.42	—			—		
N	9,659			9,659			9,659			9,659			9,659		
Log-likelihood	−2,864.18			−3,525.41			−4,603.16			−2,282.71			−2,668.79		
Pseudo-R-squared	0.0588			0.0372			0.0318			0.0729			0.0506		

Reference categories: age (18–39), gender (female), born in Australia (no), region (regional), education (primary or secondary school), employment (unemployed), income (<30,000), and family member receiving care (no). * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$—variable not included in the final model.

not included in the final models [50]. This included whether survey respondents had a family member currently receiving care and whether the survey respondent was born in Australia or lived in a metropolitan region for the statement "Australians should contribute towards the funding for aged care services that they receive in line with their ability to pay." For the other statements, the complete set of independent variables was included.

Older participants specifically females were more likely to agree or strongly agree that the government and Australians in general should contribute more towards aged care funding. Those who had a close family member(s) receiving care were more likely to agree or strongly agree with statement 1, "The Government should provide more funding for aged care" (OR = 1.26); statement 3, "I would be willing to pay more tax to ensure Australians are able to access aged care services when they need them" (OR = 1.37); and statement 4, "I would be willing to pay more tax to improve the quality of the aged care services being provided to older Australians" (OR = 1.32). Except for statement 1, respondents with a higher education were also more likely to agree or strongly agree with the other 3 statements: "Australians should contribute towards the funding for the aged care services they receive in line with their ability to pay," "I would be willing to pay more tax to ensure Australians are able to access aged care services when they need them," and "I would be willing to pay more tax to improve the quality of the aged care services being provided to older Australians." Interestingly, only respondents who had household incomes of $30K–<$60K and $60K–<$100K were more likely to agree with statement 2, "Australians should contribute towards the funding for the aged care services that they receive in line with their ability to pay," and only those with the household income of $60K–<$100K were more likely agree or strongly agree with statement 3, "I would be willing to pay more tax to ensure Australians are able to access aged care services when they need them" (Table 5).

4. Discussion

This study represents a rare example of a detailed quantitative examination of the attitudes of the general population towards components of high-quality care and funding for long-term care for older people [22, 51–54]. Other previous studies have focused on the attitudes and preferences of older people receiving services [55, 56]; the preferences of older people, people living with dementia, and their family member carers [57–59]; or the preferences of experts in dementia care [60].

This study has identified, to a large extent, consistently high expectations for long-term care services among the Australian general public. Respect and dignity were identified as the most critical components of long-term care services, with 80% of respondents identifying this as very important. The importance of treating older people with respect and dignity is often highlighted in the long-term care literature as central to providing person-centred care, but it is somewhat difficult to identify clearly when this is occurring in practice [48, 61]. Practical conceptualisations of respect and dignity in long-term care settings include respecting older adults' privacy and possessions, considering the whole person when undertaking care, considering the older person's prior and current capabilities, maintaining communication, and involving the older person in decision-making around their care and daily life. However, despite the focus on person-centred care and its importance to the general population and older people receiving long-term care, there is evidence that this basic care need is not being met currently. Reform for health and long-term care in Australia and countries across the world such as the United Kingdom (through the Individual Budgets program) has recently focused on transferring decision-making and control over finances and services provided to the care recipients [62, 63]. However, our study and other previous studies indicate that individual choice although viewed positively may not be as highly valued by older people themselves as other key components of care quality [53, 64]. Piloting of a consumer-directed care model of aged care (where older people have much more choice and responsibility in the administration of the care they receive) in Australia showed no improvement in the quality of life for older people, and other similar pilots internationally have shown similar results for older people [26, 64]. A key requirement for functioning consumer-directed care is the principle of an efficient market-based system, i.e., where aged care providers compete with each other to provide long-term care for payment from a "budget" allocated to an individual older person [65]. The older person in this theoretical model holds a lot of power, in that they make the choice about what services to purchase and from whom. However, in practice, this assumption does not hold in the current Australian system [31, 35]. The long-term care system remains complex and difficult to navigate, with older people finding it hard to find reliable information about their options for care. There is limited information about the quality of services of different care providers and strong disincentives for older people and their families to change providers once they have started receiving care—including financial and administrative barriers. This suggests that aged care policies focused mainly on choice, without a focus on other highly valued components of care, such as respect and dignity, well-qualified staff, and feeling safe and comfortable receiving care, are unlikely to fully meet the expectations of citizens. The Grattan Institute in Australia has proposed a more comprehensive model of long-term care for Australia, focusing on a rights-based system [35]. They propose basic principles such as universal access to the system, support for older people's independence and participation in the community, equity and non-discrimination in access, support for informed choice and control, and maintaining dignity across the entire period of access to care. Our findings show there is strong support in the general population for this more comprehensive approach to reform, incorporating principles of a person-centred system.

This study also investigated the extent to which demographic characteristics influenced attitudes towards determinants of quality and funding of the long-term care system. Some key findings will be discussed in turn in the following section.

Table 5: Ordinal regression analyses predicting general public attitudes towards funding the Australian aged care system.

Variable	The government should provide more funding for aged care			Australians should contribute towards the funding for the aged care services that they receive in line with their ability to pay			I would be willing to pay more tax to ensure Australians are able to access aged care services when they need them			I would be willing to pay more tax to improve the quality of the aged care services being provided to older Australians		
	OR	95% CI		OR	95% CI		OR	95% CI		OR	95% CI	
Age (40–64)	1.37***	1.18	1.60	1.18**	1.06	1.31	0.97	0.88	1.07	0.98	0.88	1.07
Age (≥65)	1.71***	1.20	2.28	1.56***	1.29	1.90	1.00	0.85	1.18	0.96	0.81	1.14
Gender (male)	0.67***	0.59	0.76	0.98	0.90	1.08	1.07	0.97	1.16	1.08	0.99	1.17
Born in Australia (yes)	1.08	0.93	1.25	—	—	—	1.14**	1.04	1.25	1.15**	1.04	1.26
Region (metro)	0.83**	0.72	0.95	—	—	—	0.97	0.89	1.05	0.97	0.89	1.05
Education (high school)	1.02	0.77	1.36	1.24**	1.03	1.48	1.23**	1.05	1.45	1.18*	1.00	1.39
Education (additional training)	0.99	0.76	1.28	1.33***	1.13	1.57	1.13	0.98	1.31	1.14	0.98	1.32
Education (undergraduate)	0.92	0.71	1.20	1.77***	1.49	2.11	1.36***	1.17	1.59	1.36***	1.16	1.60
Education (postgraduate)	0.89	0.67	1.20	1.69***	1.39	2.05	1.54***	1.30	1.83	1.55***	1.30	1.85
Employment (employed)	1.30	1.00	1.69	0.95	0.79	1.14	1.03	0.87	1.21	1.01	0.86	1.19
Employment (university student)	0.80	0.56	1.12	1.23	0.94	1.61	1.00	0.78	1.27	1.15	0.90	1.47
Employed (retired)	1.02	0.75	1.40	1.10	0.88	1.35	0.85	0.71	1.03	0.88	0.73	1.05
Income ($30,000–$59,999)	1.11	0.90	1.37	1.24**	1.08	1.43	1.07	0.95	1.21	1.06	0.94	1.20
Income ($60,000–$99,999)	0.99	0.80	1.23	1.23**	1.06	1.43	1.18*	1.03	1.34	1.11	0.98	1.27
Income (≥$100,000)	0.85	0.68	1.05	1.01	0.87	1.18	1.00	0.87	1.15	1.03	0.90	1.18
Family member receiving care (yes)	1.26**	1.06	1.48	—	—	—	1.37***	1.23	1.51	1.32**	1.19	1.46
Paying tax (yes)	0.85	0.69	1.05	1.07	0.91	1.22	1.07	0.94	1.22	1.13	0.99	1.285
N	8,705			8,705			8,705			8,705		
Log-likelihood	−3711.04			−6846.16			−8717.66			−8644.55		
Pseudo-R-squared	0.0170			0.0093			0.0082			0.0084		

Reference categories: age (18–39), gender (female), born in Australia (no), region (regional), education (primary and secondary school), employment (unemployed), income (<30,000), family member receiving aged care (no), and paying tax (no). OR = odds ratios; CI = confidence interval. $^{*}p < 0.05$, $^{**}p < 0.01$, and $^{***}p < 0.001$—variable not included in the final model.

We found that respondents in older age groups were more likely to respond that all of these statements were very important in comparison with those in younger age groups. This could show evidence that the current use of long-term care, or the intention to use it in the near future, may be influencing the levels of support participants feel towards maintaining or improving the system. The current system in Australia is designed with principles of universal access among the older population (i.e., access available to all older people, without means testing). Policy-feedback theory predicts that universality is one of the strongest predictors of intercountry differences in support for welfare programs, via the creation of a large population base who consider themselves the beneficiaries of the welfare program, creating a positive-feedback loop influencing their attitudes towards the program. Additionally, older adults are at risk of experiencing socioeconomic barriers to health and wellbeing, even if they are not receiving long-term care services, which policy-feedback theory would predict would also increase their support for the long-term care system although by a nuanced mechanism [66]. Older adults are at risk greater of experiencing insecure housing, low income, and food insecurity worldwide. They may have had recent experience with other social welfare programs, such as support with housing, or income support through government pensions, even if they have not had experience with the long-term care system specifically. Drawing from policy-feedback theory, there is evidence that the positive-feedback loop enacted by experience with welfare programs may have "spillover" effects on other welfare programs; i.e., there is evidence that increased welfare support enacted by the US government during the COVID-19 pandemic led to increased support for other similar long-standing income support programs [12].

In terms of attitudes regarding funding, the relationship with age was more mixed. This study identified a significant positive relationship between support for increased funding and the principle of co-contribution for services (in line with an individual's ability to pay) with increasing age, but not a willingness to pay additional tax to improve aged care access or quality. This may be for practical reasons: as people age, they are more likely to retire and less likely to pay income tax.

Having a close family member or friend in long-term care was found to positively influence the importance ratings for two statements, in particular, "Older people should be supported to maintain their social relationships and connections with the community" ($OR = 1.23$, $P < 0.05$) and "The identity, culture and personal history of the older person should be known and valued by staff" ($OR = 1.22$, $P < 0.01$). In a previous study of the preferred home support services with people with dementia and their carers, opportunities for social and recreational activities were considered the most important service component for people with dementia, while for carers, this service component was not as highly valued [59]. It is possible that social connection and respect for identity, culture, and history are more highly appreciated by those who have a more acute awareness of the social isolation and loss of connection that older people may experience in long-term care [48]. Additionally, having a family member currently receiving care was associated with greater support for an increase in government funding and a willingness to pay additional tax to support greater access and high-quality services. Again, this is in line with predictions from policy-feedback theory, in which family members are part of the recipients of welfare policies who then are more likely to support continuing and expanding similar policies in the future [11].

Expectations from policy-feedback theory are also supported by our findings of greater support for the statements outlining principles of high-quality care and for increased government funding to the sector among females. Females are more likely to be impacted by changes to government policy in long-term care, as the vast majority (72%) of the over 2.65 million carers in Australia are female [67]. Alternatively (or additionally), support among females for increased funding may be due to higher collectivism (i.e., higher value placed upon collective societal wellbeing rather than individual needs and goals) [68].

Those born in Australia were more likely to support that "Aged Care Staff should have the skills and training needed to provide appropriate care and support," that "Older people and their families should be supported to raise any concerns they have with the aged care service they are receiving from organisation(s) providing their care," and that "Older people should be supported to maintain their social relationships and connections with the community." Additionally, they were more likely to be willing to pay additional tax to support greater quality and access to aged care services. This high level of support may be more due to Australians' experience with other well-established welfare programs, such as the universal access to healthcare through the Medicare system [69] as outlined by policy-feedback theory. Particularly, the universality of both Medicare and long-term care systems in Australia as compared to a more limited targeted program may be protective of the level of support shown for these programs despite their large outlay from the public purse. Research has shown that the universality of welfare programs is particularly predictive of general population support for the welfare state [11].

There was evidence that greater education (e.g., completing high school, a bachelor's degree, or higher) was associated with greater support for the principle of co-contribution towards services and willingness to pay additional tax to allow greater quality and access to aged care services. The influence of income was less striking. This study did not find an impact of income on attitudes on quality determinants for aged care. There was a small impact of an increased income (for those between $30,000 to $99,000 per year) on support for co-contribution to aged care services and willingness to pay additional tax to increase access, but not to increase the quality of services. There was no significant association for those with an income greater than $100,000.

A key limitation of this study was that it was based on quota-based samples comprising computer-literate members of the general population who were likely familiar with online surveys. It is, therefore, possible that our main findings are influenced by the sociodemographic characteristics of the respondents and the online mode of administration of the survey. However, a strength of this study

sample was that it was large and was fairly representative of the Australian adult population according to several key demographic indicators including state or territory of residence, gender, and age distribution. Our sample did not target Indigenous Australians specifically, and this is a limitation, as their experiences, priorities, and responses may be significantly different from those of the mainstream general population. There is a particular need for future research to incorporate the perspectives of Indigenous Australians on this topic. Unusually, in the older adult age group, there were a larger proportion of males than expected. This could be owing to the quota sampling method used by the online survey panel company. For example, given the large sample size of the study, it may be that there was difficulty recruiting sufficiently large numbers of females aged 65 years and over. This is a limitation of the study. Secondly, the content validity and face validity of the statements are supported by the initial detailed literature review of both peer-reviewed literature and grey literature, the expert and stakeholder involvement in the item development, and the pilot testing of the items. However, a detailed assessment of the construct validity and reliability of the items was not carried out for this study. Future work to undertake a detailed assessment of the construct validity and reliability of the items would need to be undertaken if these statements were to be used as an attitudinal scale.

5. Conclusions

This study identified consistently high expectations for long-term care services across the general population, indicating a high level of postmaterialist expectations for these services. Australians expect more than just providing care, which meets basic health needs and care with activities of daily living, and they also expect that older people should have opportunities for independence, autonomy, and maintenance of dignity. In terms of how to achieve this, there was broad support among the general population both for payment of a co-contribution to the cost of care by older people using services and for increased government funding for the system. This study also identified that the majority of working-age people would be willing to contribute more income tax for aged care, under the proviso that a higher quality system would be achieved. Highlighting the impacts on the individual and the widespread use of the long-term care system may be a way for policymakers to gain support for widespread reforms in the sector.

Abbreviations

ACT: Australian Capital Territory
CI: Confidence interval
COVID-19: Coronavirus disease 2019
GDP: Gross domestic product
IQR: Interquartile range
NSW: New South Wales
NT: Northern Territory
OECD: Organisation for Economic Co-operation and Development
OR: Odds ratio
Q: Question
QLD: Queensland
SA: South Australia
TAFE: Technical and Further Education
TAS: Tasmania
VIC: Victoria
UK: United Kingdom
US: United States
WA: Western Australia
WHO: World Health Organization.

Data Availability

The data used to support the findings of this study have been deposited in the Australian Government data.gov.au repository (https://data.gov.au/data/dataset/fadcad4e-2f96-4403-bdab-63de9003016a).

Additional Points

What Is Known about This Topic? (i) Long-term care for older people is a crucial public service often significantly supported by funds from the general population through taxation or levies; and (ii) however, there is little known about the general population attitudes of quality in the sector or how it is funded. *What This Paper Adds?* (i) Most participants agreed with all of the attitudinal statements regarding the quality of care that should be provided and supported increased funding to the aged care sector; (ii) differences between subgroups were in the extent of this high level of agreement with the statements; and (iii) those born in Australia, with higher levels of education, and a family member currently receiving aged care were more willing to pay additional tax to support improvements to the aged care sector.

Ethical Approval

Ethics approval for the project was obtained from the Flinders University Social and Behavioural Research Ethics Committee (Project No. 8378).

Disclosure

The funder had no role in the study design, collection, analysis, and interpretation of data, in the writing of the articles, and in the decision to submit for publication.

Conflicts of Interest

The authors declare that they have no other conflicts of interest.

Acknowledgments

The authors would like to acknowledge the Australian Royal Commission into Aged Care Quality and Safety, which provided support for this study to be undertaken. The authors would also like to acknowledge the participants who

gave up their time to take part in the study. This work was funded by a research grant awarded by the Australian Royal Commission into Aged Care Quality and Safety. CH was supported by an Australian Research Council Linkage Project (grant no. LP170100664) while undertaking this work. JR and RM received funding from organisations ECH, Helping Hand, Uniting Age Well, Uniting ACT NSW, and Presbyterian Aged Care as part of the Australian Research Council Linkage Project.

Supplementary Materials

Supplementary Table A.1: final attitudinal statements included in the survey, which provides the long-form written attitudinal statements presented to participants in the survey. Supplementary Table A.2: sociodemographic characteristics of the samples who indicated they were paying tax and not paying tax, which provides the sociodemographic characteristics of the subgroups of the sample according to whether they were paying or are not paying tax currently. (*Supplementary Materials*)

References

[1] Australian Government Department of Health, *2018-19 Report On the Operation Of the Aged Care Act 1997*, Commonwealth of Australia, Canberra, Australia, 2019.

[2] E. J. Emanuel, "How can the United States spend its health care dollars better?" *Journal of the American Medical Association*, vol. 316, no. 24, pp. 2604–2606, 2016.

[3] Organisation for Economic Co-Operation and Development, *Long-term Care For Older People. The OECD Health Project*, OECD Publishing, Paris, France, 2005.

[4] M. Ariaans, P. Linden, and C. Wendt, "Worlds of long-term care: a typology of OECD countries," *Health Policy*, vol. 125, no. 5, pp. 609–617, 2021.

[5] Organisation for Economic Co-Operation and Development, *Health at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, France, 2015.

[6] Royal Commission into Aged Care Quality and Safety, *Financing Aged Care Consultation Paper 2*, Commonwealth of Australia, Adelaide, Australia, 2020.

[7] B. Da Roit, B. Le Bihan, and A. Österle, "Long-term care policies in Italy, Austria and France: variations in cash-for-care schemes," *Social Policy and Administration*, vol. 41, no. 6, pp. 653–671, 2007.

[8] Australian Institute of Health and Welfare, "Explore people using aged care," *GEN Aged Care Data*, 2020, https://gen-agedcaredata.gov.au/Topics/People-using-aged-care/Explore-people-using-aged-care.

[9] "Boris Johnson does the unthinkable and raises taxes to pay for aged care," in *The Weekly Source*, DCM Media, Balmain East, Australia, 2021.

[10] A. L. Janus and A. Koslowski, "Whose responsibility? Elder support norms regarding the provision and financing of assistance with daily activities across economically developed countries," *European Journal of Ageing*, vol. 17, no. 1, pp. 95–108, 2020.

[11] J. Jordan, "Policy feedback and support for the welfare state," *Journal of European Social Policy*, vol. 23, no. 2, pp. 134–148, 2013.

[12] D. Crabtree and W. Wehde, "Examining policy feedback effects from COVID-19 on social welfare support: developing an outcome distance dimension," *Policy and Politics*, vol. 51, no. 1, pp. 156–179, 2023.

[13] M. Goossen, "The gender gap in welfare state attitudes in Europe: the role of unpaid labour and family policy," *Journal of European Social Policy*, vol. 30, no. 4, pp. 452–466, 2020.

[14] E. G. Larsen, "Personal politics? Healthcare policies, personal experiences and government attitudes," *Journal of European Social Policy*, vol. 30, no. 4, pp. 467–479, 2020.

[15] K. Weaver, "Paths and forks or chutes and ladders?: negative feedbacks and policy regime change," *Journal of Public Policy*, vol. 30, no. 2, pp. 137–162, 2010.

[16] M. Umeda, "The politics of aging: age difference in welfare issue salience in Japan 1972–2016," *Political Behavior*, vol. 44, no. 2, pp. 575–597, 2020.

[17] J. Lynch and M. Myrskyla, "Always the third rail? Pension income and policy preferences in European Democracies," *Comparative Political Studies*, vol. 42, no. 8, pp. 1068–1097, 2009.

[18] M. R. Busemeyer, A. Abrassart, and R. Nezi, "Beyond positive and negative: New perspectives on feedback effects in public opinion on the welfare state," *British Journal of Political Science*, vol. 51, no. 1, pp. 137–162, 2019.

[19] S. Read, B. Erens, R. Wittenberg et al., "Public preferences for paying for social care in later life in England: a latent class analysis," *Social Science & Medicine*, vol. 274, 2021.

[20] S. Gregory, *Attitudes to Health and Social Care: Review of Existing Research*, The Kings Fund, London, UK, 2014.

[21] B. Kaambwa, G. Chen, J. Khadka et al., "A preference for quality: Australian general public's willingness to pay for home and residential aged care," *Social Science & Medicine*, vol. 289, 2021.

[22] A. Hajek, T. Lehnert, A. Wegener, S. G. Riedel-Heller, and H. König, "Correlates of preferences for autonomy in long-term care: results of a population-based survey among older individuals in Germany," *Patient Preference and Adherence*, vol. 12, pp. 71–78, 2018.

[23] G. Chen, J. Ratcliffe, R. Milte, J. Khadka, and B. Kaambwa, "Quality of care experience in aged care: an Australia-Wide discrete choice experiment to elicit preference weights," *Social Science & Medicine*, vol. 289, 2021.

[24] S. Dyer, M. Valeri, N. Arora, T. Ross, and M. Winsall, *Review of International Systems for Long-Term Care of Older People*, Flinders University, Adelaide, Australia, 2019.

[25] S. M. Dyer, E. Liu, E. S. Gnanamanickam et al., "Clustered domestic residential aged care in Australia: fewer hospitalisations and better quality of life," *Medical Journal of Australia*, vol. 208, no. 10, pp. 433–438, 2018.

[26] C. B. Moore, "Consumer directed care aged care reforms in Australia since 2009: a retrospective policy analysis," *Health Policy*, vol. 125, no. 5, pp. 577–581, 2021.

[27] Royal Commission into Aged Care Quality and Safety, "Terms of Reference," 2018, https://agedcare.royalcommission.gov.au/Pages/default.aspx.

[28] L. Lloyd, A. Banerjee, C. Harrington, F. F Jacobsen, and M. Szebehely, "It is a scandal! Comparing the causes and consequences of nursing home media scandals in five countries," *International Journal of Sociology & Social Policy*, vol. 34, no. 1/2, pp. 2–18, 2014.

[29] T. Lancet, "Aged care in Australia falls short," *The Lancet*, vol. 394, no. 10210, p. 1686, 2019.

[30] K. S. McGilton, A. Escrig-Pinol, A. Gordon et al., "Uncovering the devaluation of nursing home staff during COVID-19: are

we fuelling the next health care crisis," *Journal of the American Medical Directors Association*, vol. 21, no. 7, pp. 962–965, 2020.

[31] Royal commission into Aged Care Quality and Safety, *Interim Report: Neglect*, Commonwealth of Australia, Canberra, Australia, 2019.

[32] T. A. Comans, K. Nguyen, V. Zelenyuk et al., "The cost of residential aged care," in *Research Paper 9, Royal Commission into Aged Care Quality and Safety*, Commonwealth of Australia, Canberra, Australia, 2020.

[33] Royal Commission into Aged Care Quality and Safety, *Final Report: Care, Dignity and Respect*, Commonwealth of Australia, Canberra, Australia, 2021.

[34] Gen Aged Care Data, "Residential aged care quality indicators- july to september 2023," 2024, https://www.gen-agedcaredata.gov.au/topics/quality-in-aged-care/residential-aged-care-quality-indicators-latest-release.

[35] S. Duckett, A. Stobart, and H. Swerissen, *Reforming Aged Care: A Practical Plan for a Rights-Based System*, Grattan Institute Melbourne, Australia, 2020.

[36] Australian Labor Party, "The economic case for aged care reform," 2021, https://clareoneil.com/media-centre/speeches/the-economic-case-for-aged-care-reform/.

[37] C. Rosenblatt, "The call for nursing home reform: will it have any effect?" in *Forbes*, Forbes Jersey City, New Jersy, 2023.

[38] S. Duckett, "Reform of aged care is hard, but we should have already started," in *The Sydney Morning Herald*, Nine Entertainment Co, Sydney, Australia, 2020.

[39] H. Levins, "The policy and politics of long-term care: latest views on reform," 2022, https://ldi.upenn.edu/our-work/research-updates/the-policy-and-politics-of-long-term-care-latest-views-on-reform/.

[40] C. Hugo, E. Isenring, D. Sinclair, and E. Agarwal, "*What does it cost to feed aged care residents in Australia*," *Nutrition and Dietetics*, vol. 75, no. 1, pp. 6–10, 2018.

[41] C. Harries and A. Stiggelbout, "Approaches to measuring patients' decision-making," in *Handbook of Health Research Methods*, A. Bowling and S. Ebrahim, Eds., pp. 362–393, Open University Press, Berkshire, UK, 2005.

[42] K. A. Phillips, F. R. Johnson, and T. Maddala, "Measuring what people value: a comparison of attitude and preference surveys," *Health Services Research*, vol. 37, no. 6, pp. 1659–1679, 2002.

[43] J. Ratcliffe, K. Laver, L. Couzner, I. D. Cameron, L. Gray, and M. Crotty, "Not just about costs: the role of health economics in facilitating decision making in aged care," *Age and Ageing*, vol. 39, no. 4, pp. 426–429, 2010.

[44] E. Lancsar, D. G. Fiebig, and A. R. Hole, "Discrete choice experiments: a guide to model specification, estimation and software," *PharmacoEconomics*, vol. 35, no. 7, pp. 697–716, 2017.

[45] J. Louviere, D. Hensher, and J. Swait, *Stated Choice Methods: Analysis and Interpretation*, Cambridge University Press, Cambridge, UK, 2000.

[46] J. Ratcliffe, J. Khadka, S. Kumaran, and B. Kaambwa, "What price quality in aged care? Findings from a national survey of more than 6500 income taxpayers," *Medical Journal of Australia*, vol. 215, no. 7, pp. 307–310 e1, 2021.

[47] J. Ratcliffe, G. Chen, J. Cleland et al., "Australia's aged care system: assessing the views and preferences of the general public for quality of care and future funding," *Caring Futures Institute*, Flinders University, Adelaide, Australia, 2020.

[48] J. Cleland, C. Hutchinson, J. Khadka, R. Milte, and J. Ratcliffe, "What defines quality of care for older people in aged care? A comprehensive literature review," *Geriatrics and Gerontology International*, vol. 21, no. 9, pp. 765–778, 2021.

[49] D. Pevalin and K. Robson, *The Stata Survival Manual*, McGraw Hill, Maidenhead, UK, 2009.

[50] E. W. Steyerberg, *Clinical Prediction Models A Practical Approach to Development, Validation, and Updating*, Springer, New York, NY, USA, 2nd edition, 2009.

[51] R. Brau and M. Lippi Bruni, "Eliciting the demand for long-term care coverage: a discrete choice modelling analysis," *Health Economics*, vol. 17, no. 3, pp. 411–433, 2008.

[52] C. Fernández-Carro, "Ageing at home, co-residence or institutionalisation? Preferred care and residential arrangements of older adults in Spain," *Ageing and Society*, vol. 36, no. 3, pp. 586–612, 2016.

[53] A. P. Nieboer, X. Koolman, and E. A. Stolk, "Preferences for long-term care services: willingness to pay estimates derived from a discrete choice experiment," *Social Science and Medicine*, vol. 70, no. 9, pp. 1317–1325, 2010.

[54] K. Sawamura, H. Sano, and M. Nakanishi, "Japanese public long-term care insured: preferences for future long-term care facilities, including relocation, waiting times, and individualized care," *Journal of the American Medical Directors Association*, vol. 16, no. 4, pp. 350 e9–e20, 2015.

[55] B. Kaambwa, E. Lancsar, N. McCaffrey et al., "Investigating consumers' and informal carers' views and preferences for consumer directed care: a discrete choice experiment," *Social Science & Medicine*, vol. 140, pp. 81–94, 2015.

[56] J. L. Wolff, J. D. Kasper, and A. D. Shore, "Long-term care preferences among older adults: a moving target?" *Journal of Aging & Social Policy*, vol. 20, no. 2, pp. 182–200, 2008.

[57] P. H. Chau, T. Kwok, J. Woo, F. Chan, E. Hui, and K. C. Chan, "Disagreement in preference for residential care between family caregivers and elders is greater among cognitively impaired elders group than cognitively intact elders group," *International Journal of Geriatric Psychiatry*, vol. 25, no. 1, pp. 46–54, 2010.

[58] H. Chester, P. Clarkson, L. Davies et al., "A discrete choice experiment to explore carer preferences," *Quality in Ageing and Older Adults*, vol. 18, no. 1, pp. 33–43, 2017.

[59] H. Chester, P. Clarkson, L. Davies et al., "People with dementia and carer preferences for home support services in early-stage dementia," *Aging & Mental Health*, vol. 22, no. 2, pp. 270–279, 2016.

[60] S. Tucker, C. Brand, C. Sutcliffe et al., "What makes institutional long-term care the most appropriate setting for people with dementia? Exploring the influence of client characteristics, decision-maker attributes, and country in 8 European nations," *Journal of the American Medical Directors Association*, vol. 17, no. 5, pp. 465 e9–e465 e15, 2016.

[61] A. C. Kogan, K. Wilber, and L. Mosqueda, "Person-centered care for older adults with chronic conditions and functional impairment: a systematic literature review," *Journal of the American Geriatrics Society*, vol. 64, no. 1, pp. e1–e7, 2016.

[62] Kpmg, *Applicability of Consumer Directed Care Principles in Residential Aged Care Homes: Final Report*, KPMG, Amstelveen, Netherlands, 2014.

[63] M. Stevens, C. Glendinning, S. Jacobs et al., "Assessing the role of increasing choice in English social care services," *Journal of Social Policy*, vol. 40, no. 2, pp. 257–274, 2011.

[64] C. Glendinning, M. Stevens, J. Manthrope et al., *Evaluation of the Individual Budgets Pilot Program: Final Report*, University of York, New York, NY, USA, 2008.

[65] N. Bulamu, B. Kaambwa, L. Gill et al., "Impact of consumer-directed care on quality of life in the community aged care

sector," *Geriatrics and Gerontology International*, vol. 17, no. 10, pp. 1399–1405, 2017.

[66] World Health Organization, *Decade of Health Ageing: Plan of Action*, World Health Organization, Geneva, Switzerland, 2020.

[67] Australian Bureau of Statistics, "Disability, ageing and carers, Australia: summary of findings, 2018," 2019, https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-releasekey-statistics.

[68] H. Dabiriyan Tehrani and S. Yamini, "Gender differences concerning the horizontal and vertical individualism and collectivism: a meta-analysis," *Psychological Studies*, vol. 67, no. 1, pp. 11–27, 2022.

[69] M. Wade, *Medicare ahead by a mile in popularity stakes*, The Sydney Morning Herald, Fairfax Media: Sydney, Australia, 2014.