

Engaging older Australians in sexual health research: SHAPE2 survey recruitment and sample

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ABSTRACT

Background. Sexual health research rarely includes older age groups and the sexual health needs of older Australians are not well understood. Older adults are online in increasing numbers; however, internet surveys involving samples of older adults and sensitive topics remain uncommon. In 2021, we developed an online survey to explore the sexual health needs of Australians aged 60+ years. We describe here survey recruitment and sample obtained, comparing it with national population data (Australian Bureau of Statistics) and the sample of the similar 'Sex, Age and Me' study from 2015. **Methods.** We recruited 1470 people with a staggered three-phase strategy: (1) emails to organisations and community groups; (2) paid Facebook advertising; and (3) passive recruitment. Half (50.6%) found out about the study via an organisation or group and just over a third (35.7%) from Facebook. **Results.** The sample was equally balanced between men (49.9%) and women (49.7%) (0.4% other gender identities). Participants were aged 60–92 years (median 69 years) with all Australian States/Territories represented. Facebook recruits were younger, more likely to be working rather than retired, and more likely to live outside a major city, than those recruited by other means. **Conclusions.** Using the recruitment methods described, we successfully obtained a diverse and fairly representative sample of older Australians within the constraints of a convenience sample and on a modest budget. This research sheds light on ways to engage an under-served demographic in sexual health research. Our experience shows that many older adults are amenable to recruitment for online sexual health surveys using the approaches outlined.

Keywords: ageing, health promotion, internet survey, older adults, public health, recruitment, sexual health, survey methods.

Introduction

Older adults' sexual health and sexual behaviour has gathered more research attention in recent years, reflecting the emerging needs of ageing populations globally. It is well established that many older adults continue to be interested in sex, to engage in both partnered and solo sexual activity, and are able to articulate their changing sexual health needs.^{1–6} To address the evolving sexual health needs of older adults, quality research using appropriate study designs and recruitment methods is necessary. While the definition of 'older adult' varies between studies, typically ranging in age from between 50 years to 65 years onwards;^{1,7–11} for the purposes of the present study we defined 'older adults' as those aged 60 years and over following the rationale of Malta.¹²

Sexually transmissible infections (STIs) are rising among older age groups in Australia^{13,14} as they are in other countries,^{15–17} and condom use is lower among older Australians than among younger people.^{18–21} These factors, alongside the fact that older adults' sexual health is not regularly addressed in the Australian primary care setting,^{22–24} indicate the need for more attention on older adults' sexual health. In light of this, researchers have advocated for better access to relevant sexual health promotion materials and sexual healthcare for older Australians.^{17,25–28} Best practice in sexual health promotion and sexual health service provision has been explored for younger demographics but may look different from that needed for older people where more research is needed to ensure they are fit for purpose.

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In recent years, several studies have sought to improve our understanding of the sexual health of older Australians and to explore how their needs could be better met.^{24,29,30} Two were large sexual health surveys: (1) the 'Second Australian Study of Health and Relationships' (ASHR2), which included older adults within a larger sample; and (2) 'Sex, Age and Me' (SA&M), which recruited only older adults. Each used a different recruitment strategy to access participants, which may have had an impact on study findings.

ASHR2 (2012–2013) collected data via a computer-assisted telephone survey and used population-based sampling to recruit approximately 20 000 people aged 16–69 years, of whom older adults aged 60–69 years were recruited proportionately to their percentage in the population.²⁹ Survey results found lower rates of condom use among older men than among younger men, that STI knowledge was also poorer among older participants compared to younger participants,^{21,31} and that older Australians used dating apps and online dating, albeit at lower rates than younger age groups.³² Older participants were more likely to complete the survey via a landline telephone than younger people who were more likely to use a mobile phone, and older women were more likely to rely on a landline than were older men.³³ These findings suggest that older adults' participation was influenced by recruitment methods and that engagement with technology may vary by gender.

SA&M (2015) recruited older adults aged 60 years and over. It comprised a survey ($n = 2137$), plus qualitative interviews with a sub-set of survey participants ($n = 53$).³⁰ The survey found low rates of STI testing despite high STI knowledge overall,^{25,27} and interview participants highlighted the importance of age-inclusive services and sexual health promotion relevant to older adults.²⁸ The study used a multi-pronged approach to recruitment, which included advertising via radio, TV, social media, paper flyers, in-person events, and promotion through relevant organisations. Participants were able to complete the survey either online or on paper and the vast majority (98.3%, $n = 2101$) undertook the survey online.³⁰ When asked how they found out about the study, 54% indicated that they had seen it on Facebook, and 13% said they had seen it on another website,³⁰ demonstrating that online recruitment strategies can be effective for recruiting older Australians for sexual health research.

Another study, the qualitative 'Sexual Health, Ageing, Perspectives and Education' (SHAPE) Project was conducted in 2016–2017. This research explored the barriers to sexual health discussions between health care providers and older patients^{23,24} and concluded that a digital checklist tool could help facilitate these conversations in primary care.³⁴ The older adults in the SHAPE project were aged 60 years and over and participated in interviews and focus groups ($n = 21$). They were recruited via promotional materials sent to relevant organisations, through the project website, researcher networks, and snowballing.²⁴ Findings showed that these older adults had many sexual health education needs, but

felt unable to bring up the topic in consultations or that their concerns were dismissed, with some reporting ageist attitudes by their health care professionals.^{23,24}

To explore whether these findings from SHAPE were typical of today's older Australians, we launched 'SHAPE2', an online survey to explore the sexual health information-seeking behaviours of people aged 60 years and over in Australia in 2021. Given the sensitive nature of this research and the different recruitment approaches used in previous studies, we report here the study methodology for SHAPE2 including study design, eligibility and recruitment methods. We compare the socio-demographic and behavioural profile of our participants with national population data and with the sample of the SA&M study conducted 6 years earlier. We used a staggered three-phase approach to recruit participants and were cognisant of the need to investigate how effective this was at achieving a diverse representation of people aged 60 years and over. This paper reflects on the experiences, strengths and limitations of our recruitment strategies, to assist others who may be considering recruiting older research participants for sexual health research.

Materials and methods

SHAPE2 study design

The SHAPE2 online survey employed a cross-sectional design, which is reported here guided by the CHERRIES checklist criteria for internet survey reporting.³⁵ The survey was designed using Qualtrics software and included 63 questions, each on an individual screen, organised into nine blocks (see Supplementary material, Appendix A for survey questions). We used adaptive questioning, whereby some questions were displayed conditionally depending on previous responses, ensuring all survey items displayed to participants were relevant. The survey was tested for usability and technical functionality by colleagues of the researchers and was then pilot tested with approximately 10 older adults, before final refinements. We initially designed this study as an online survey because of logistical difficulties with administering hard copy surveys during the coronavirus disease 2019 (COVID-19) pandemic and due to budget constraints, however, later in the data collection process a small number of paper surveys were posted out to those who contacted the researchers requesting hard copies. The online survey took participants a median of 17 min to complete.

The survey included questions on sexual health information-seeking as well as on demographics, relationships, identity, and behaviours. The questions on sexual health information-seeking included whether participants had sought sexual health information since turning 60 years old, what sources they had accessed, what sexual health topics they had inquired about, whether they had found answers to their questions, where they would look for sexual health information in future,

what topics they would like to know more about and what makes sexual health resources trustworthy and appealing (Supplementary material, Appendix A).

Population and sampling

Like both SA&M and the original SHAPE Project, an age of 60 years or over and Australian residency were the only inclusion criteria, thus allowing for greater comparison with these earlier studies. Our aim was to recruit a sample size of 500 participants over 2 months to obtain confidence intervals of approximately $\pm 4\%$ around a proportion of 50%. However, we adjusted our target upwards and extended our recruitment timeline after strong initial response numbers.

We sought to recruit a sample as representative of older Australians as possible within the limitations of a convenience sample. We monitored basic demographic characteristics of participants as survey responses were submitted (age, location, gender, sexual orientation) and adjusted our recruitment strategy where necessary to recruit as diverse and representative a sample as was feasible. This study was undertaken on a modest budget of AUD400, which was used for paid Facebook advertising.

Study ethics

Ethical approval was granted by the University of Melbourne Human Research Ethics Committee (HREC ID 2057393). Prior to survey commencement, prospective participants were provided with a plain language statement, which included information about the study, expected time commitment, contact details for the researchers, information about data storage and security, and support services in case the survey brought up anything troubling for them. Before commencing, participants provided consent and proceeded to the survey questions; those that declined were exited from the survey. The survey was anonymous, and participants were not asked any identifying information.

Respondents could review and change previous responses using a 'back' button, skip questions they preferred not to answer and could exit the survey at any time. As the survey was anonymous; however, responses that were already entered could not be withdrawn. During data collection we checked responses to free-text questions periodically to identify any potential signs of distress (e.g. reference to past sexual assault). A small number of comments were identified as potentially indicating distress and were brought to the attention of the ethics committee. However, follow up with these respondents was not possible due to the survey's anonymous design.

Recruitment

The survey opened on the 31 March 2021 with an initial soft release where it was promoted within researchers' networks

and on Twitter. Recruitment began in earnest on 7 April 2021 and was conducted in three staggered phases. Phase 1 (7 April–20 May 2021) involved emailing organisations that serve or attract older adults; Phase 2 (8 May–7 June 2021) used paid Facebook advertising targeting the population of interest; and Phase 3 (8 June–31 September) was the passive recruitment phase where the survey remained open, but active recruitment ceased. No incentives were given for participation.

During Phase 1, emails were sent in batches to approximately 2500 organisations, community groups (e.g. Council on the Ageing (COTA) Victoria, Probus, University of the Third Age, Men's Sheds) and social groups via government councils. These contacts were found via internet searches. The email explained the study and the recruitment flyer was attached (Fig. 1). Recipients were encouraged to share the link and flyer with their members or communities as they saw fit (e.g. via newsletters, social media, or noticeboards). While we contacted online dating sites in Phase 1, none of them promoted the SHAPE2 survey.

For Phase 2, we launched a paid Facebook advertisement that was displayed only to older adults within Australia. After a week, we added a second advertisement to be displayed only to older women in Australia in an effort to recruit more women. We ran both advertisements concurrently for 2 weeks. For the final week, we stopped the second advertisement and continued only with the general advertisement, for which we changed the geographical settings so it was shown only in three States/Territories where we sought to increase participation. After 4 weeks, Facebook advertising ended as our AUD400 budget was reached.

After active recruitment ceased, we continued to record a small number of survey responses every few days and prospective participants continued to make contact by email and phone. Because of this, we left the survey open and allowed responses to trickled in, forming Phase 3 of recruitment. After 3 months of this passive recruitment, the survey was closed on 30 September 2021 after it had been open for a total of 6 months. This is the same timeframe for data collection as SA&M, providing opportunity for comparison.

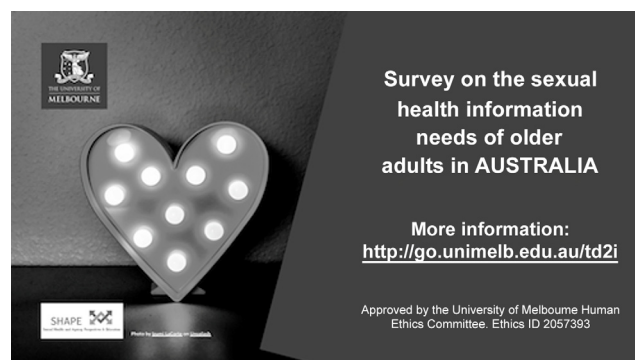


Fig. 1. SHAPE2 survey recruitment flyer.

Data presentation

We use descriptive statistics to present the characteristics of the SHAPE2 sample, comparing this with population data and the SA&M study sample, and we outline the differences between SHAPE2 participants based on how they were recruited into our study.

Results

A total of 1470 participants were recruited. During the first part of Phase 1, we recruited 543 participants (31 days). While Phase 1 and 2 were running concurrently, we recruited a further 725 participants (13 days), 149 more people were recruited during the later part of Phase 2 (18 days), and Phase 3 yielded only a further 53 participants (115 days) (Fig. 2).

It is not possible to know how many people viewed the advertisement for the study, and we cannot calculate the response rate. However, of the 1964 individuals who clicked on the survey link, 1529 (77.9%) consented and met inclusion criteria, 1470 (74.8%) provided responses that could be used in the analysis, having answered some or all survey questions and 1057 (53.9%) reached the end of the survey. A breakdown of response numbers is in Fig. 3.

Respondents were not prevented from attempting the survey more than once; instead, multiple entries were identified and removed during data cleaning. This was performed by identifying duplicate IP addresses and checking key demographics (age, gender, postcode) to identify attempts from the same individual. Where duplicates were identified the most complete response was retained and where multiple

entries were complete, the most recent was retained. Sixty three entries were deleted, the majority of which had not progressed beyond the inclusion criteria screens, suggesting these people opened the survey before coming back later to complete it. Interestingly, there were 21 IP addresses with more than one response recorded where the key demographics were distinct, suggesting partners or friends using the same device to respond to the survey, including an instance where four people used the same device. Where the IP address was the same, but key demographics distinct, responses were retained on the basis of these being different respondents.

We asked participants where they had heard about the survey. A total 29.7% did not complete this question (2.5% declined to answer and 27.2% did not reach the question which was near the end of the survey). However, of the 1070 people who responded, half (50.6%) found out through a newsletter/organisation or club and just over a third (35.7%) found out through Facebook (Table 1).

Sample recruited

We successfully recruited a sample with approximately equal numbers of male and female participants, that included ages 60–92 years (median age 69 years), and with respondents from throughout Australia. Participant characteristics are in Table 2 and comparisons made with Australian Bureau of Statistics (ABS) population data, and the SA&M sample from 2015. SHAPE2 participants are further broken down by whether they were recruited via Facebook or by other means.

Postcodes were compared to ABS data to determine remoteness³⁶ and socio-economic deciles.³⁷ Close to two thirds of survey participants were located in major cities (63.8%),

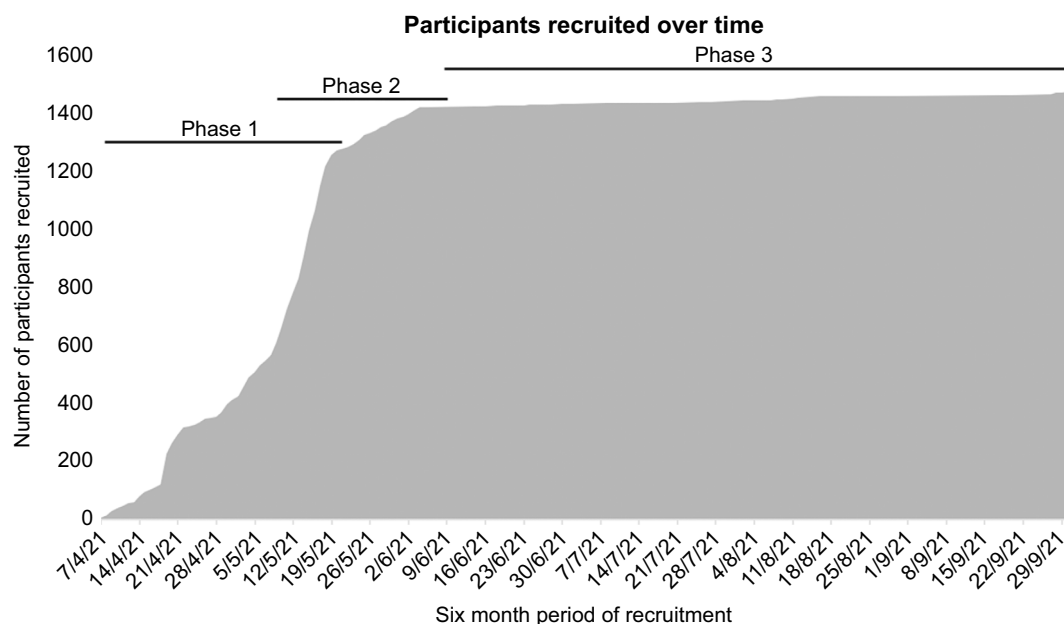


Fig. 2. Participants recruited to the SHAPE2 survey over time.

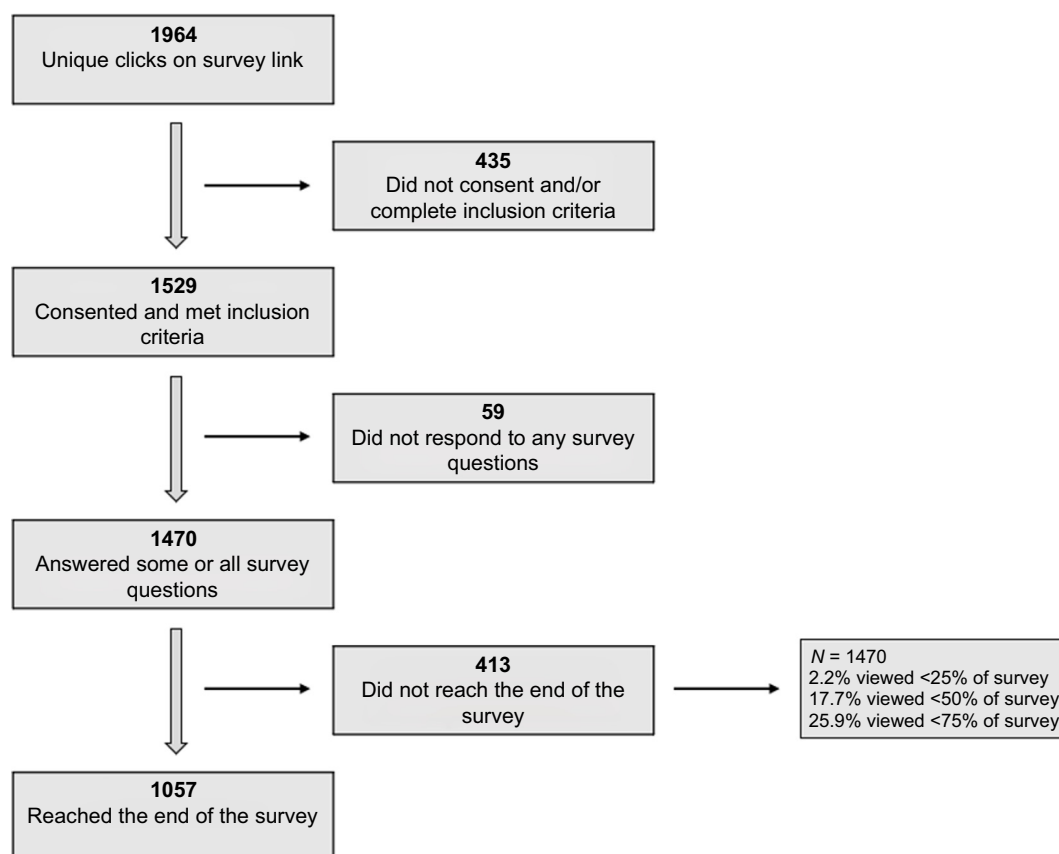


Fig. 3. Participants recruited for the SHAPE2 survey.

Table 1. Sources of recruitment for SHAPE2 participants compared with Sex, Age and Me participants.

Source of recruitment	SHAPE2 ^A		Sex, Age and Me ^B	
	N = 1070 ^C		N = 2137	
	n	%	n	%
Newsletter/from an organisation or club of which I am a member	541	50.6	158	7.4
Facebook	382	35.7	1136	53.2
From a friend or family member	55	5.1	65	3.1
Other social media (e.g. Twitter, Instagram)	9	0.8	11	0.5
From a GP or other health professional	3	0.3	12	0.6
Other online source (website, blog, forum, dating service)	1	<0.1	441	20.7
Media (newspaper, magazine, radio, television)	1	<0.1	272	12.7
Other	42	3.9	127	5.9
Not reported	36	3.4	24	1.1

^AParticipants could only report one source for SHAPE2.

^BParticipants could report more than one source for SA&M.

^CNot all participants (72.8%) viewed this question as it was near the end of the survey and some had exited prior to this point. 'Not reported' includes those who viewed but did not answer this question.

approximately a third in regional locations (35.0%), and a small number in remote locations (1.2%) (Table 3). Postcodes from all socio-economic deciles were represented in the sample but skewed towards more advantaged geographical areas (Table 3).

Two thirds of respondents were retired (65.6%), one quarter were working either full-time, part-time or casually (27.1%), and the remainder designated other employment statuses (Table 3). Participants were able to state their occupation in a free-text question and gave a wide range of current or past jobs including cafe owner, dentist, taxi driver, teacher, public servant, mail sorter, corrections officer, farmer, flight attendant, nurse, and minister of religion among others.

Of those who answered the sexual orientation question (73.8% of participants), the majority were heterosexual (85.2%), and 11.2% either homosexual or bisexual (Table 3). Of those who answered the relationship status question (73.9% of participants), three out of five (61.8%) were in a cohabiting relationship with their spouse or partner, 19.8% were single and either dating or not-dating, while 8.5% were in a committed relationship but living separately, sometimes termed a LAT relationship (living apart together)³⁸ (Table 3). It was not feasible to compare with ABS or SA&M as these data were categorised differently across datasets.

Table 2. Key demographics of SHAPE2 survey participants compared to national population statistics and to the Sex, Age and Me study.

	SHAPE2						ABS population data for ages 60+ ^A N = 5 788 780 %	Sex, Age and Me sample ³⁰ N = 2137 %
	Total sample		Participants recruited via Facebook		Participants recruited via other means			
	N = 1470		N = 382 ^B		N = 652 ^B			
	n	%	n	%	n	%		
Gender								
Male	734	49.9	167	43.7	366	56.1	47.3	67.7
Female	730	49.7	214	56.0	282	43.3	52.7	32.0
Other gender identities	6	0.4	1	0.3	4	0.6	Not collected	0.4
Age (years)								
60–64	455	31.0	161	42.2	143	21.9	25.2	40.7
65–69	387	26.3	120	31.4	156	23.9	22.1	34.3
70–74	321	21.8	70	18.3	169	25.9	19.7	15.6
75–79	187	12.7	20	5.2	115	17.7	14.1	5.8
80–84	93	6.3	10	2.6	53	8.1	9.5	2.6
85+	27	1.8	1	0.3	16	2.5	9.5	1.0
State/Territory								
New South Wales	393	26.7	73	19.1	187	28.7	32.4	31.1
Victoria	372	25.3	131	34.3	143	21.9	25.1	24.4
Queensland	197	13.4	71	18.6	60	9.2	20.1	19.1
Western Australia	174	11.8	31	8.1	94	14.4	9.9	9.3
Australian Capital Territory	154	10.5	10	2.7	113	17.3	1.4	3.4
South Australia	110	7.5	45	11.8	25	3.8	7.9	9.1
Tasmania	58	4.0	13	3.4	28	4.3	2.6	3.0
Northern Territory	12	0.8	8	2.1	2	0.3	0.6	0.7

^APopulation percentages based on Australian Bureau of Statistics (ABS) data for ages 60 and over only (June 2021).⁵³

^BOnly includes participants who answered the source of recruitment question.

Discussion

In this paper, we outline the recruitment methods and sample obtained from the SHAPE2 online sexual health survey of older adults in Australia conducted in 2021. Our results can be summarised by three main findings. First, we found that older adults are willing to participate in online research, including on the sensitive topic of sexual health. Second, the recruitment methods of combining emails to organisations and paid Facebook advertising were successful for obtaining a fairly large and representative convenience sample on a low budget. Third, participants recruited via Facebook had different characteristics from those recruited via other means. We also identified certain similarities and differences with the sample collected for SA&M 6 years earlier and discuss these below.

Sample demographics

Gender

Our sample closely represented Australian population data in terms of gender, with around a 1:1 ratio of males and

females. This was different from SA&M where men were overrepresented with a 2:1 ratio between males and females. As older men are typically earlier technology adopters than older women,^{33,39} this may be indicative of older women's increasing engagement with technology in recent years. Additionally, one of our Facebook advertisements was displayed to older women only, which helped correct an initial gender discrepancy, demonstrating the utility of targeted advertising.

Age

While we captured a wide range of ages, our sample was skewed toward the younger age bands, particularly for those recruited via Facebook. The SHAPE2 sample was less skewed towards younger age groups than SA&M, but both were affected by this overrepresentation of younger ages. As co-morbidities and cognitive challenges increase with age, and rates of internet access decline with age,⁴⁰ it is unsurprising that fewer of the oldest age groups participated. This does, however, represent a limitation of SHAPE2 as it did for SA&M.

Table 3. SHAPE2 survey participant demographics.

	SHAPE2		
	Total sample (N = 1470)	Participants recruited via Facebook (N = 382)	Participants recruited via other means (N = 652)
Location	N = 1456	N = 376	N = 650
Major cities	929 (63.8%)	209 (55.6%)	451 (69.4%)
Regional	510 (35.0%)	162 (43.1%)	195 (30.0%)
Remote	17 (1.2%)	5 (1.3%)	4 (0.6%)
Socio-economic status of postcode (decile) ^A	N = 1456	N = 376	N = 650
1–2	188 (12.9%)	61 (16.2%)	58 (8.9%)
3–4	244 (16.8%)	73 (19.4%)	104 (16.0%)
5–6	251 (17.2%)	80 (21.3%)	88 (13.5%)
7–8	293 (20.1%)	82 (21.8%)	114 (17.5%)
9–10	480 (33.0%)	80 (21.3%)	286 (44.0%)
Employment status ^B	N = 1467	N = 381	N = 650
Retired	963 (65.6%)	201 (52.8%)	488 (75.1%)
Working full-time	166 (11.3%)	58 (15.2%)	48 (7.4%)
Working part-time	171 (11.7%)	55 (14.4%)	63 (9.7%)
Casual work	63 (4.3%)	20 (5.3%)	21 (3.2%)
Volunteer work	144 (9.8%)	21 (5.5%)	88 (13.5%)
Unemployed and looking for work	22 (1.5%)	8 (2.1%)	6 (0.9%)
Unemployed and not looking for work	14 (1.0%)	11 (2.9%)	1 (0.2%)
Student	7 (0.5%)	3 (0.8%)	3 (0.5%)
Carer	32 (2.2%)	12 (3.2%)	13 (2.0%)
Disability support pension	45 (3.1%)	23 (6.0%)	10 (1.5%)
Other	51 (3.5%)	13 (3.4%)	28 (4.3%)
Sexual orientation	N = 1085	N = 380	N = 647
Heterosexual	924 (85.2%)	325 (85.5%)	545 (84.2%)
Homosexual (lesbian or gay)	76 (7.0%)	26 (6.8%)	48 (7.4%)
Bisexual	46 (4.2%)	19 (5.0%)	25 (3.9%)
Asexual	12 (1.1%)	2 (0.5%)	10 (1.6%)
Something else	27 (2.5%)	8 (2.1%)	19 (2.9%)
Relationship status	N = 1087	N = 380	N = 651
Living with my husband/wife/partner	672 (61.8%)	215 (56.6%)	421 (64.7%)
Single and not dating	183 (16.8%)	73 (19.2%)	101 (15.5%)
Committed relationship, living in separate houses	92 (8.5%)	35 (9.2%)	56 (8.6%)
Single and dating	33 (3.0%)	19 (5.0%)	13 (2.0%)
Long-distance relationship with a partner I have met in person	31 (2.9%)	12 (3.2%)	14 (2.2%)
Long-distance relationship with a partner I have not met in person	8 (0.7%)	2 (0.5%)	4 (0.6%)
Something else	68 (6.3%)	24 (6.3%)	42 (6.5%)

^ALower deciles indicate comparative socio-economic disadvantage for the postcode area and higher deciles indicate more advantaged areas.

^BPercentages do not add up to 100% as participants could select more than one option for this question.

Location

Geographical distribution by State/Territory was broadly reflective of national statistics, with the exception of the Australian Capital Territory (ACT) which was over-represented in the SHAPE2 sample. Our sample was, however, less

representative by State/Territory than SA&M, with the reason for this disparity unknown. In 2020, 65.9% of Australians over 65 years were living in Major Cities, 32.6% in Inner or Outer Regional areas, and 1.5% in Remote and Very Remote settings,⁴¹ which is close to the proportions of

the SHAPE2 sample. These findings demonstrate that the recruitment methods used were effective at reaching Australians from a wide range of locations.

Sexual orientation

It is estimated that between 4%^{42,43} and 10%⁴⁴ of the Australian general population identify as lesbian, gay or bisexual, indicating that our sample (11.2% homosexual or bisexual) is over representative of minority sexual orientations. Of the SA&M sample, 10.3% identified as gay, lesbian or bisexual, suggesting similarities in recruitment and/or a higher level of interest in sexual health research among sexual minority communities. A small number of the organisations emailed to promote the SHAPE2 study were LGBT specific, which likely increased participation among these demographics.

Sample size

A similarity between SHAPE2 and SA&M is that both studies exceeded their initial targets during the early stages of recruitment. SA&M initially aimed to recruit 600 participants, but adjusted their goal upwards after receiving over 300 responses in the first week.³⁰ SHAPE2 initially aimed to recruit 500 people over 2 months and adjusted this upwards after exceeding this number in the first month of recruitment. This strong response rate builds on the existing research, showing that older adults are willing to participate in sexual health research and are amenable to doing so online.^{30,45}

Social media vs other recruitment methods

Many older Australians are online, particularly the 'younger-old' aged in their 60s and 70s⁴⁰ and many are using social media, with Facebook the most popular platform for older age groups.⁴⁶ Just over a third of our sample found out about the survey via Facebook, contributing to the evidence that social media is effective for recruiting older people for sexual health surveys,^{30,45} much as it has been shown to be effective for recruiting young people for sexual health research^{47,48} and for recruiting diverse and hard to reach populations for health research broadly.⁴⁹

A greater proportion of our sample, however, came via newsletters/organisations or clubs (contacted by email during Phase 1). This is in contrast to SA&M, which recruited around half their sample from Facebook and a smaller proportion from newsletters/organisations or clubs. These differences in recruitment methods may contribute to why our sample was a better fit to ABS population data. While our email campaign was effective, it was not highly efficient. During Phase 1, recruitment we sent out approximately 2500 emails. Given that only 541 people indicated they found out about the survey via a newsletter or group, this shows that this recruitment method is labour-intensive and low yield, with most emails generating no response. Additionally, a potential limitation of the SHAPE2 sample is that it may over-represent

the types of people who are involved in community groups and clubs.

By the end of recruitment Phases 1 and 2, we had recruited 1417 participants, representing 96% of our final sample. The low number recruited during Phase 3 of passive recruitment shows that few people accessed the survey through onwards-sharing after the active recruitment phase, demonstrating minimal benefit from leaving the survey open.

Characteristics of Facebook vs non-Facebook participants

In comparing those in our sample recruited via Facebook with those recruited via other means, Facebook recruits tended to be younger (median age of 67 years as compared to 69 years for the overall sample) and were less likely to be retired. This finding that Facebook is more effective for recruiting the 'younger-old' is consistent with a 2017 online survey of dementia caregivers in the United States that found Facebook effective for recruiting participants aged 65–74 years, but not for those aged 75 years and over.⁵⁰ They were slightly less likely to be in major cities and were more evenly spread across socio-economic deciles, whereas those recruited via other means disproportionately came from the highest deciles. They were also more likely to be female, however, this is attributable to part of the Facebook campaign being targeted only to women.

Strengths and limitations

A strength of SHAPE2 recruitment was the low budget used to recruit a sizeable sample. Our experience shows that a mixture of email promotion combined with Facebook advertising is not only feasible, but also economical for recruitment. While the reach of paid Facebook advertising is dependent on the amount of money spent, even our modest budget yielded good results. The SA&M researchers also found Facebook advertising to be 'a cost-effective strategy'.³⁰

While our recruitment strategies were effective, there are some limitations to our sample and its generalisability, as have been observed in other internet surveys of older adults.⁵¹ Older Australians are using the internet more than ever however not all are online, particularly those aged 85 years and over.⁴⁰ As with other online-only surveys of older adults, people who are not online would not have been able to participate.³⁹ One prospective participant who saw the flyer posted on a community noticeboard phoned to request paper copies for themselves and others who did not have internet access. We posted out these hard copies, however, it would not have been financially feasible to include hard copy distribution as a core component of the recruitment strategy. There may also have been others without internet access who were interested, but who did not contact us. It is unclear, however, how effective it would have been to include hard copy distribution as part of our recruitment strategy. SA&M distributed hard copies, but few were returned, with the

vast majority completing the survey online.³⁰ This suggests that paper surveys are not preferred by many older adults, and those who are harder to reach would require a more resource-intensive approach to access them beyond the mere provision of a hard copy format. Including reply-paid envelopes was likely an important factor in the majority (96.6%) of 1876 survey responses of Australian retirement village residents being returned in paper format (only 3.4% online) in a 2015 study.⁵²

A limitation of the SHAPE2 study is that it was only available in English; thus, people who do not read and write English confidently would have been unable to participate. Additionally, we did not include a question about ethnicity or country of birth in the demographic questions for our survey and as a result we do not know how representative the sample was in this respect.

Conclusion

This paper discusses the recruitment of older Australians for a sexual health survey, given sexual health is of increasing importance to Australia's ageing population. In common with the similar SA&M study, we found that older adults are willing to participate in online sexual health research and that recruitment via social media is effective. In contrast with SA&M, the SHAPE2 sample was more representative in terms of gender and age, possibly attributable to the differences in recruitment and to changes in online engagement among older adults in the intervening years. These findings can help inform the design of future online surveys seeking to recruit older participants, particularly in researching sexual health and other sensitive topics.

Supplementary material

Supplementary material is available [online](#).

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