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The *Sex, Age, and Me Study*: Recruitment and sampling for a large mixed-methods study of sexual health and relationships in an older Australian population

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Abstract

Older people are often excluded from large studies of sexual health, as it is assumed that they are not having sex or are reluctant to talk about sensitive topics, and are therefore difficult to recruit. We outline the sampling and recruitment strategies from a recent study on sexual health and relationships among older people. *Sex, Age and Me* was a nationwide Australian study that examined sexual health, relationship patterns, safer-sex practices, and STI knowledge of Australians aged 60 years and over. The study used a mixed-methods approach to establish baseline levels of knowledge and to develop deeper insights into older adult's understandings and practices relating to sexual health. Data collection took place in 2015, with 2,137 participants completing a quantitative survey and 53 participating in one-on-one semi-structured interviews. As the feasibility of this type of study has been largely untested until now, we provide detailed information on the study's recruitment strategies and methods. We also compare key characteristics of our sample with national estimates to assess its degree of representativeness. This study provides evidence to challenge the assumptions that older people will not take part in sexual health-related research and details a novel and successful way to recruit participants in this area.

Keywords: older adults; sexually transmitted infections; sexual health; safer-sex; mixed methods; Australia

Introduction

The sexual health needs of older people¹ have been largely ignored in research and policymaking (Kirkman, Fox, and Dickson-Swift 2016). This is due, in part, to misconceptions that many older people are asexual or unwilling to discuss issues relating to sex (Minichiello, Plummer and Seal 1996). However, just like people of any age, older people who are sexually active may well be interested or concerned about their sexual well-being, including practising safer sex in some circumstances. Indeed, sexually transmitted infections (STIs) in older people have been rising in countries such as the USA (Centers for Disease Control and Prevention 2014), England (Public Health England 2016), and Australia (The Kirby Institute 2014). For example, in England, reported new STIs among those aged 65 years and older increased from 1,667 to 1,926 between 2012 and 2014, a 16% increase in two years (Public Health England 2016). In Australia, reported notifiable STIs (other than HIV) among those aged 60 years and older increased from 542 in 2009 to 794 in 2013 (The Kirby Institute 2014). Although the total number remains low, this represents a 46% increase in the number of infections over this five-year period.

Those entering older age are also living longer and healthier lives (Salomon et al. 2013). In Western countries, older people are projected to account for an increasing proportion of the population, independent of future fertility and migration rates (Australian Bureau of Statistics (ABS) 2009). In Australia, for example, the proportion of people aged 65 years and older is anticipated to rise from 14% in 2012 to 22% in 2061 (Australian Bureau of Statistics (ABS) 2013).

Many also began their sexual lives prior to HIV and the widespread use of condoms, and are less likely to have received sexuality education when younger. Changes in social and cultural mores also mean that the current older generation is more likely than previous older generations to form new relationships later in life, often following the cessation of a long-term monogamous partnership (Gott 2006). These relationships are increasingly taking different forms, including living-apart-together relationships (Reimondos, Evans and Gray 2011) and friends-with-benefits (Kirkman, Dickson-Swift, and Fox 2015). Some older people are also using online dating sites to meet new partners (Malta 2007; McWilliams and Barrett 2014).

The limited evidence available further suggests that older people may be less likely to use condoms than younger age groups (de Visser et al. 2014) and less inclined to refuse sex without a condom (Bateson et al. 2012). Some older people also appear to underestimate their risk of acquiring an STI (Syme, Cohn, and Barnack-Tavlaris 2016) and there are some indications that rates of STI testing may need to be higher (Tillman

¹ In industrialised countries such as Australia, 'older age' is typically defined as starting at 60 or 65 years (World Health Organization). We use 60 years or older to define older age unless otherwise specified. We acknowledge, however, that using a chronological age to define older age is socially and culturally constructed and may not represent a person's biological age or their personal perceptions of older age.

and Mark 2015). Moreover, studies have shown that some healthcare providers are reluctant to talk to their older patients about sexuality and STI related issues (Gott, Hinchliff, and Galena 2004; Hinchliff and Gott 2011).

In this context, there is a particular need for studies that provide detailed data on knowledge about STIs, sexual behaviour patterns, and safer sexual practices to help make sense of recent STI increases among older populations and to inform prevention strategies. However, undertaking research on sexuality is often viewed as challenging on account of the sensitive nature of discussing our sexual lives, and a perceived reticence of older people to talk about sex (Gledhill, Abbey and Schweitzer 2008).

Studies over the past decade have consistently found a significant proportion of older people report sexual interest and activity across their lifespan (for example see Lee et al. 2016; Lindau et al. 2007). Yet, older people have historically been excluded from many large-scale studies on sexual health and relationships. For example, the largest study of sex and relationships in Australia, the *Sex in Australia* survey, limited its recruitment to those aged 16-59 years in 2001-2002 (Smith et al. 2003) and 16-69 years in 2012-2013 (Richters et al. 2014). A number of recent international studies have, however, extended their upper age limit to the mid-70s (Field et al. 2013; Mitchell et al. 2013) or older (Herbenick et al. 2010). While these studies show older people will participate in such studies, they are not designed to examine the unique experiences of older people. Moreover, survey-based studies in Australia and abroad that have specifically sampled older people tend to focus on the effects of physical health on sexuality in older age or on sexual difficulties (Laumann et al. 2005; Lee et al. 2016; Lindau et al. 2007; Moreira Jr et al. 2008; Nicolosi et al. 2004) and have rarely examined issues relating to STIs, safer-sex practices, or broader aspects of sexuality, sexual health in older people. A few studies have used secondary data from sexual health clinics to explore STIs among older populations (Bodley-Tickell et al. 2008; Bourne and Minichiello 2009). Although these studies provide some useful information, they are unable to explore the broader contexts and relationships in which sex and sexual health take place and the findings are limited to those seeking help at such clinics.

A growing body of qualitative research has begun to illustrate the complex roles and meanings that sex can hold for people in later life. Recent research conducted in Australia has, for example, shown that sex can hold varying importance in the lives of older people (Fileborn, Thorpe, Hawkes, Minichiello, and Pitts 2015; Fileborn, Thorpe, Hawkes, Minichiello, Pitts, et al. 2015; Malta 2013). These studies have mostly focused on older women, and found that for some women sex became more important and pleasurable as they entered older age. Some others, however, lost interest in sex, although many remained sexually active to please their partners. For others still, the importance of sex fluctuated depending on relationship, health, economic, and other factors (for an international example also see Laganà and Maciel 2010). Similarly, older women in Hinchliff and Gott's (2008) UK-based research contested the notion that older age is synonymous with asexuality, although these participants also drew on a range of highly-gendered (and arguably limiting) scripts on sexuality. Sandberg's (2013)

Swedish-based research highlighted the complex ways in which older men accommodate and validate sexuality and sexual expression in later-life through the lens of intimacy. Taken together, these qualitative studies highlight that sex remains important for many people in later life, though there is also much variation in levels of desire and experience. The research also suggests that older people's sexual expression can both depart from and challenge youthful and gendered scripts of sexuality, as well as continue to be constrained and potentially devalued by them.

As noted above, topics associated with sex and sexual health can be highly sensitive, and often pose significant challenges for recruiting large samples. Until now, the feasibility for conducting such studies among older populations in Australia has largely gone untested. The *Sex, Age, and Me* project is the first Australian study of its kind, providing much-needed data on the sexual health of older Australians. Drawing on mixed methods, the project took a multifaceted look at the sexual lives of a sample of Australian adults aged 60 years and older, such as their sexual behaviour, relationship/dating patterns, and their knowledge of STIs and safer-sex practices. In this article, we describe the methods we used to successfully recruit a large number of older participants, and compare our sample to the national census to examine its degree of representativeness.

Overview of the Sex, Age and Me Project

Design and Setting

Funded by the Australian Research Council, *Sex, Age and Me* was a large Australian study that aimed to examine sexual health and relationships among people aged 60 years and older. Given the lack of research on the topic, this project adopted a convergent parallel (also called triangulation) mixed-methods design (Creswell and Plano Clark 2011), consisting of two key components: 1) a quantitative cross-sectional survey; and 2) in-depth qualitative one-on-one interviews with a random selection of survey participants. The quantitative and qualitative aspects of the project were conducted concurrently and independently and were of equal importance. This design was chosen to enable both breadth and depth of understanding of the area, including establishing baseline knowledge on a broad range of topics related to sexual health and relationships and identifying and giving insight into emerging issues and themes. Within this design, our key objectives were to focus on a large sample of older Australians and utilise both the quantitative and qualitative components to explore their:

- Sexual behaviours, relationships and dating patterns;
- Knowledge of STIs and STI prevention;
- Use of safer-sex practices;
- Gaps in knowledge and safer-sex practices;

- Sexual health help-seeking behaviours; and
- Ways of giving meaning to and understanding sex and safer sex in later life, and the discursive positions they draw on in doing so (qualitative component only).

Recruitment

Prior to commencing recruitment, a project title and logo were created to give the study an attractive and recognisable presence. The project title was workshopped among the project team and the final title was chosen to make the project potentially more relatable to older participants, particularly by including the words “me” and “age”. Several logos were then designed by a professional service. A focus group of people aged 60+ (n=8) provided feedback on the logo they found most appealing. The chosen logo, shown in figure 1, was displayed on all study advertisements.

[Insert figure 1 about here]

Age and country of residence were the only inclusion criteria, with all Australian residents aged 60 years and older being eligible to participate in the study. A novel and multipronged recruitment strategy was implemented to reach a diverse range of older people from around the country. This strategy was implemented as financial limitations prohibited the use of population-based sampling. It also reflects our interest in identifying different patterns of sex and relationships, and approaches to safer sex, rather than providing population estimates of prevalence. Our aim was to gain a sample of sufficient size to allow reliable statistical analyses within specific sub-populations such as those who were having sex in potentially risky contexts. To maximise participation, the survey was made available both online and in paper form. Advertisements contained both a link to the online survey and a contact telephone number to request a paper copy of the survey if this was preferred.

Table 1 presents an overview of the methods used to recruit participants, including when each method was deployed. Specifically, participation was invited via a variety of media sources including interviews conducted on mainstream national and state radio stations, and news articles in mainstream newspapers and publications targeting older Australians. The study was also promoted widely using age-targeted advertising on Facebook, which is used by approximately 1.1 million older Australians (according to statistics provided by the Facebook online advertising system), and advertisements were also placed on a national online dating site, which is popular among the over-60s.

[Insert table 1 about here]

To gain further reach, study advertisements were sent to national and local ageing organisations. Advertisements were also sent to all local governments in Australia, as well as major senior citizens clubs and sexual health clinics in each Australian state and

territory. Many of these organisations advertised the study on their noticeboards, social media accounts, newsletters, websites and/or to their contacts lists.

Paper copies of the surveys with reply-paid envelopes were also distributed to locations that were often visited by older Australians, such as a seniors' festival in Melbourne and conferences focusing on older people and sexuality.

Participants who took part in the qualitative interviews were recruited through the quantitative survey component of the study. At the end of the survey, participants were asked if they would like to take part in an interview and, if so, to provide their contact details. The contact details provided by interested participants were stored separately to the survey responses and were not linked to the survey. A random selection of participants who provided their contact details was later contacted for an interview.

Quantitative Survey

The survey was conducted between July 2015 and December 2015. It contained 130 questions and took a median time of 33 minutes (IQR = 26 - 44 minutes) for participants to complete. The survey focused on the following topic areas:

- Demographics, including age, gender identity, sexual orientation, socioeconomic status, ethnicity/cultural background, geographical location and relationship status
- Knowledge of STIs
- STI status and history of STI testing
- Sexual practices, including safer-sex practices, engaged in by participants at their most recent sexual encounter, and over the past 12 months
- Type of relationship with sexual partner and other contextual features of participants' most recent sexual encounter
- Alcohol and recreational drug use at most recent sexual encounter and over the past 12 months
- Use of online dating sites and other dating services
- Overall health and well-being, including physical and mental health

A selection of the survey questions was drawn from the *Sex in Australia* studies (Richters et al. 2014; Smith et al. 2003) to enable comparisons between these datasets. Utilising items from this research was also important for enhancing trustworthiness of the data given the high levels of credibility attributed to data from *Sex in Australia*. Trustworthiness was further established by utilising, wherever possible, standard validated scales with high levels of reliability. These included the Depression Anxiety Stress Scale (DASS) (Henry and Crawford 2005), the Warwick-Edinburgh Mental Well-being Scale (Tennant et al. 2007), and the Life Satisfaction Scale (Diener et al. 1985). Where existing scales or questions were not available from previous research, additional questions were developed.

Initially, we sought a sample of 600 individuals. This was determined to allow analyses within the larger sample subpopulations, such as age differences in STI knowledge among the female participants, with sufficient sensitivity to detect a medium effect size of 0.25 at statistical power of $\beta=0.95$ (two tailed $\alpha=0.05$). The target sample, however, was adjusted upward after more than 300 participants completed the survey in the first week. This strong response meant it became possible to conduct analyses on a greater number of subgroups and with stronger statistical power, such as those who had previous sexual experiences with sex workers and those who may have been at risk of acquiring an STI. We therefore continued to recruit participants until sufficient samples were obtained in these and other subgroups for conducting reliable multivariate statistical analyses.

A total of 2,137 Australian residents aged 60 years and older completed the survey with an age range of 60-94 years and a mean age of 66.7 years (SD = 5.6). Nearly all participants completed the survey online (n = 2,101); only 36 paper surveys were returned within the study period. At the completion of the survey, participants were asked how they found out about the survey. Table 2 displays a summary of responses. Over half (53%) first saw the survey on Facebook, including advertisements on the Facebook pages of organisations as well as targeted paid advertising. A further 13% reported seeing the advertisement on a website (likely on an ageing organisation's website or a news website) and 8% reported hearing about the study on the radio.

[Insert table 2 about here]

Although population-based sampling was not used for this study, the final sample was diverse and included participants from all major sociodemographic backgrounds and from all states and territories of Australia. Table 3 compares key characteristics of our sample, such as residential location, gender, age, marital status and education, with available Australian Bureau of Statistics (ABS) estimates drawn from national census data. The geographical distribution of our sample was almost identical to ABS data for people aged 60 years and older at June 30 2015. Male participants, however, were overrepresented in the sample (our sample: 68% vs. ABS: 47 %) as were those aged in their 60s (our sample: 75% vs. ABS: 50%). Marital status and highest level of education were compared with 2011 Australian census data for those aged 55 years and older, which was the closest comparison data available (Australian Bureau of Statistics (ABS) 2016a). When compared with the general population, participants in the sample were more likely to be university educated (our sample: 45% vs. ABS: 19%) but a little less likely to be married (our sample: 50% vs. ABS: 63%).

[Insert table 3 about here]

Qualitative Interviews

Qualitative one-on-one semi-structured interviews were conducted between August 2015 and January 2016. These interviews followed a basic qualitative research design (Tisdell and Merriam 2015) seeking to understand participant's experiences and

understandings of the world. Typical interviews ranged in length from 30 to 60 minutes. The aim of the interviews was to develop an understanding of why older people engage in specific safer-sex practices or not, and to explore the discourses that inform their knowledge and practices. The interviews included questions on the following topics:

- Meanings assigned to, and understandings of, sex, sexual pleasure, and safer-sex
- Barriers and facilitators to seeking education on safer-sex;
- Barriers and facilitators to talking about sex with healthcare professionals;
- Current knowledge about STIs and safer-sex practices;
- Current safer-sex practices of older Australians;
- Help-seeking behaviours of older Australians

Interviews were conducted by the third-named author of this paper, who is female aged in her 30s, and were carried out on either the telephone, Skype or in person, depending upon the preference of the participant and geographic practicalities. There was no apparent difference in the quality or content of interviews based upon the mode of participation, and this is consistent with research to date (Hanna 2012; Holt 2010; Sturges and Hanrahan 2004). The interviews were digitally recorded with the participants' consent, and transcribed by a professional service. Interviews were conducted until data saturation occurred, at which point we ceased recruiting new participants. We sought to enhance trustworthiness, or reliability, in the data through regular debriefing sessions between the interviewer and members of the project team, inviting participants to review and check their transcripts for accuracy, and conducting coding validity checks by having additional independent coders to identify levels of agreement in coding.

In total, 525 (24.6%) participants indicated they were interested in being interviewed. Of this group, a random sample of 175 participants were contacted via email and 53 of these participants agreed to participate in a one-on-one interview. The sample of potential interviewees was derived by contacting every third survey participant who had expressed interest in being interviewed. Of this group, 43 opted for telephone, eight for Skype, and two in person. Participants ranged in age from 55-80 years, with a mean age of 66.6 years ($SD = 5.6$). Given that these participants were recruited from the survey participant pool, they share similar socio-demographic characteristics. Table 4 displays a sample profile of the interview participants.

[Insert table 4 about here]

Ethics

The study was approved by the La Trobe University Human Research Ethics Committee (approval number S15/25). All survey responses were anonymous, ensuring participants could answer honestly and confidentially (Mitchell et al. 2007). Although a

large proportion of participants first heard about the survey on Facebook, participants were required to click on a hyperlink which took them to a separate website to complete the survey. We therefore did not have access to participants Facebook profiles. As stated previously, participants who were interested in taking part in one-on-one interviews provided their contact details at the end of the survey, but survey responses and contact details were stored separately and therefore not linked.

Informed consent was obtained prior to the survey and interviews. Survey participants were advised that they were able to skip any questions that they did not feel comfortable answering, and that they could withdraw from participation at any point throughout the survey. Likewise, interview participants were informed that they could skip any questions that they did not feel comfortable answering, and that they could withdraw their participation at any point during the interview and up until de-identification of the interview data. Participants were also provided with the contact details for counselling and support services, as well as specialist sexual health services, in the event that any questions raised issues or concerns for them.

Discussion

With a large sample and a mixed-methods design, *Sex, Age and Me* is set to provide much-needed comprehensive data on the sexual lives, sexual health, safer-sex practices and STI knowledge of Australians aged 60 years and older. It is also one of the largest studies in the world specifically focused on the sexual health of older people. Currently, older people are absent in sexual health policies in Australia (Kirkman, Fox, and Dickson-Swift 2016). This is largely because STI rates are much lower among older people compared with younger generations, although rates in older populations have been rising in recent years. This study further provides a method that was successful in recruiting large samples of older people involving sensitive topics, and may therefore be instructive for future studies conducted elsewhere in the world.

A prevailing view among some is that older people are unwilling to engage in discussions of sexuality and STI-related topics. Our experiences and observations found that at least some older people are willing. Over 2,000 Australian residents aged 60 years and over chose to participate in our study, openly detailing their sexual experiences, sexual health, and relationships. Likewise, more than one quarter of survey participants volunteered to be interviewed, which far exceeded our earlier expectations. A central component to enabling these discussions was providing interview participants with a level of control over how they participated. For instance, many elected to take part via phone to enhance their comfort and perceived level of anonymity, and this appears to have facilitated their ease in discussing their intimate experiences. Given that many participants indicated that they did not discuss sex with their peers, it is possible that having an interviewer considerably younger than them may have also provided an environment in which they felt comfortable and able to share their experiences. That said, some previous research has suggested interviewers who are closer in age may also put older participants at ease (Malta 2012). It is also possible that simply talking to a professional (i.e., the researcher) may have made

some participants feel more comfortable talking about sensitive topics (Mitchell et al. 2007), which may not always be the case with peers.

Conducting population-based studies is typically expensive, and the study lacked sufficient funding for this. We therefore aimed to gather as large and diverse a sample as possible, and to do this we employed a multipronged recruitment strategy. The majority of participants completed the survey online (n=2,101) and heard or read about the study from a large range of sources, with the largest numbers recruited via media interviews, targeted advertising through key ageing organisations, and on Facebook. This method proved to be a fast and cost-effective strategy for reaching large numbers of older Australians. We also had paper-based surveys available, however only 36 useable surveys were returned to the project team during the study period, despite close to 1,000 being distributed. These experiences replicate previous work that has also found online methods to be effective in recruiting older participants (Malta 2012). Despite not using population-based sampling, our participants were recruited from a wide range of ages, residential locations, and socioeconomic backgrounds across Australia. This is also the largest and most comprehensive study of the sexual health of older Australians currently available and it captured a more diverse range of experiences than previous clinic-based studies.

That said, we obtained a larger number of men than women in both the survey and interviews. This is somewhat unusual in social research (Gledhill, Abbey, and Schweitzer 2008). For example, the *Sex in Australia* studies reported higher female than male response rates (Richters et al. 2014; Smith et al. 2003). One possible explanation is the focus on 'sex' in the study title and advertisement. Previous research has found advertisement wording can affect recruitment in studies examining sexual and romantic relationships (Malta 2012). It may be that in the current older generation, men are more comfortable talking about sex than women. Indeed, many older women grew up in a time when the focus of sex was largely on male pleasure (Sandberg 2013), which stands in considerable contrast with some of the approaches and decision-making that younger women engage in today (Wigginton et al. 2016). Thus, the focus on sex may have contributed towards the apparent reluctance of women to participate or, conversely, the willingness of men to participate. This, however, is speculative and requires further investigation to identify possible barriers and facilitators of participating in a study on sex.

There were some limitations to the methods we employed. First, response rates could not be calculated as it is not possible to know how many people viewed the advertisements. Second, due to self-selection, it was not possible to directly compare the characteristics of those who participated and those who did not. Third, only participants with access to the Internet were able to view online advertisements. While we advertised both online and offline, participants with Internet access may have received greater exposure to advertising in total given both forms were available to them. That said, Internet usage among older Australians is relatively high. In 2014, 68% of the 65 years and above group reported accessing the Internet (Australian Communications and Media Authority [ACMA] 2015). Previous research has also

shown those with lower education and household incomes are less likely to have Internet access (Australian Bureau of Statistics [ABS] 2016b; Australian Communications and Media Authority (ACMA) 2015). These differences in Internet access might be reflected in the fact that our sample was younger and more highly educated compared with the general population. Similar education biases have, however, also been found in previous surveys examining sex (Richters et al. 2014) and health (Tolonen, Dobson, and Kulathinal 2005).

These limitations, however, should not discourage researchers from using online methodologies. The number of Australians who have never accessed the Internet halved between 2010 and 2014 (Australian Communications and Media Authority [ACMA] 2015). Thus, the use of online methodologies for studies of older people will likely become less biased in the future as older people continue to access the Internet in greater numbers. Given the reach and relative ease of contacting a large number of older people using both online and media-based recruitment strategies, future STI education and awareness campaigns may also wish to consider using similar strategies to those we used when targeting older people.

As the interview participants were drawn from a pool of survey participants, the interview sample also faced some similar limitations to the surveys. Overall, this group of participants was highly educated, articulate, and willing and able to discuss their sexual lives. This may not be reflective of all older people, and a number of interview participants openly questioned the extent to which they were similar to their peers given their willingness to talk about sex. Nonetheless the findings from these interviews will provide rich insight into the understandings and experiences of at least some older Australians.

In summary, this study involved a mixed-methods approach to comprehensively look at the sexual health and relationships of a large sample of Australians aged 60+. While further research is needed to gather a representative sample of older Australians, the study nevertheless attracted a diverse sample and clearly demonstrated that issues relating to sexuality and sexual health are sufficiently important for many older people to be willing to participate in research. We expect that findings from this study will inform healthcare providers, policymakers, and other researchers about the need to include older people in discussions relating to sexuality and sexual health. There is also a need for further research on sexual health in older populations, particularly given the increasing STI rates in this group, not only in Australia but also in such countries as the USA and UK. This study should therefore provide some guidance to future researchers on developing effective methodologies for obtaining large samples of older people in studies of sensitive topics such as sexuality, whether these involve quantitative surveys, qualitative interviews, or both.

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References

- Australian Bureau of Statistics (ABS). 2009. "Future Population Growth and Ageing." In *Australian Social Trends, March 2009*. Canberra: Australian Bureau of Statistics (ABS).
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features10March%202009>
- . 2013. "Populations Projections Australia, 2012 to 2101 ()." In. Canberra: Australian Bureau of Statistics (ABS).
[http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/13D196FB0DBECC3BCA257C2E00173FAD/\\$File/32220_2012%20\(base\)%20to%202101.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/13D196FB0DBECC3BCA257C2E00173FAD/$File/32220_2012%20(base)%20to%202101.pdf)
- . 2016a. "ABS.Stat." In Canberra: Australian Bureau of Statistics (ABS).
<http://stat.data.abs.gov.au/>. Accessed 18th March 2016.
- . 2016b. "Household Use of Information Technology, Australia 2014-15 (Cat. No. 8146.0)." In. Canberra: Australian Bureau of Statistics (ABS).
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02014-15?OpenDocument>
- Australian Communications and Media Authority (ACMA). 2015. "Report 1 - Australians' Digital Lives." In *Communications report 2013-14 series*. Canberra: AMCA.
- Bateson, D. J., E. Weisberg, K. J. McCaffery, and G. M. Luscombe. 2012. "When Online Becomes Offline: Attitudes to Safer Sex Practices in Older and Younger Women Using an Australian Internet Dating Service." *Sexual Health* 9 (2): 152-159.
- Bodley-Tickell, A. T., B. Olowokure, S. Bhaduri, D. J. White, D. Ward, J. D. C. Ross, G. Smith, H. V. Duggal, and P. Goold. 2008. "Trends in Sexually Transmitted Infections (Other Than HIV) in Older People: Analysis of Data from an Enhanced Surveillance System." *Sexually Transmitted Infections* 84 (4): 312-317.
- Bourne, C., and V. Minichiello. 2009. "Sexual Behaviour and Diagnosis of People over the Age of 50 Attending a Sexual Health Clinic." *Australasian Journal on Ageing* 28 (1): 32-36.
- Centers for Disease Control and Prevention. 2014. "Sexually Transmitted Disease Surveillance 2013." In Atlanta: U.S: Department of Health and Human Services.
- Creswell, J. W., and V. L. Plano Clark. 2011. *Designing and Conducting Mixed Methods Research*. 2nd ed. Thousand Oaks, CA: SAGE.
- de Visser, R. O., P. B. Badcock, C. Rissel, J. Richters, A. M. Smith, A. E. Grulich, and J. M. Simpson. 2014. "Safer Sex and Condom Use: Findings from the Second Australian Study of Health and Relationships." *Sexual Health* 11 (5): 495-504.
- Diener, E., R. A. Emmons, R. J. Larsen, and S. Griffin. 1985. "The Satisfaction with Life Scale." *Journal of Personality Assessment* 49 (1): 71-75.
- Field, N., C. H. Mercer, P. Sonnenberg, C. Tanton, S. Clifton, K. R. Mitchell, B. Erens, W. Macdowall, F. Wu, and J. Datta. 2013. "Associations between Health and Sexual Lifestyles in Britain: Findings from the Third National Survey of Sexual Attitudes and Lifestyles (Natsal-3)." *The Lancet* 382 (9907): 1830-1844.

- Fileborn, B., R. Thorpe, G. Hawkes, V. Minichiello, and M. Pitts. 2015. "Sex and the (Older) Single Girl: Experiences of Sex and Dating in Later Life." *Journal of Aging Studies* 33 (Apr.): 67-75..
- Fileborn, B., R. Thorpe, G. Hawkes, V. Minichiello, M. Pitts, and T. Dune. 2015. "Sex, Desire and Pleasure: Considering the Experiences of Older Australian Women." *Sexual and Relationship Therapy* 30 (1): 117-130.
- Gledhill, S. E., J. A. Abbey, and R. Schweitzer. 2008. "Sampling Methods: Methodological Issues Involved in the Recruitment of Older People into a Study of Sexuality." *The Australian Journal of Advanced Nursing* 26 (1): 84-94.
- Gott, M. 2006. "Sexual Health and the New Ageing." *Age and Ageing* 35 (2): 106-107.
- Gott, M., S. Hinchliff, and E. Galena. 2004. "General Practitioner Attitudes to Discussing Sexual Health Issues with Older People." *Social Science & Medicine* 58 (11): 2093-2103.
- Hanna, P. 2012. "Using Internet Technologies (Such as Skype) as a Research Medium: A Research Note." *Qualitative Research* 12 (2): 239-242.
- Henry, J. D., and J. R. Crawford. 2005. "The Short-Form Version of the Depression Anxiety Stress Scales (Dass-21): Construct Validity and Normative Data in a Large Non-Clinical Sample." *British Journal of Clinical Psychology* 44 (2): 227-239.
- Herbenick, D., M. Reece, V. Schick, S. A. Sanders, B. Dodge, and J. D. Fortenberry. 2010. "Sexual Behavior in the United States: Results from a National Probability Sample of Men and Women Ages 14–94." *The Journal of Sexual Medicine* 7 (s5): 255-265.
- Hinchliff, S., and M. Gott. 2008. "Challenging Social Myths and Stereotypes of Women and Aging: Heterosexual Women Talk About Sex." *Journal of Women and Aging* 20 (1-2):
- . 2011. "Seeking Medical Help for Sexual Concerns in Mid-and Later Life: A Review of the Literature." *Journal of Sex Research* 48 (2-3): 106-117.
- Holt, A. 2010. "Using the Telephone for Narrative Interviewing: A Research Note." *Qualitative Research* 10 (1): 113-121.
- Kirkman, L., V. Dickson-Swift, and C. Fox. 2015. "Midlife Relationship Diversity, Sexual Fluidity, Wellbeing and Sexual Health from a Rural Perspective." *Rural Society* 24 (3): 266-281.
- Kirkman, L., C. Fox, and V. Dickson-Swift. 2016. "A Case for Sexual Health Policy That Includes Midlife and Older Adult Sexuality and Sexual Health." *The International Journal of Aging and Society* 6 (2): 17-27.
- Laganà, L., and M. Maciel. 2010. "Sexual Desire among Mexican-American Older Women: A Qualitative Study." *Culture, Health & Sexuality* 12 (6): 705-719.
- Laumann, E. O., A. Nicolosi, D. B. Glasser, A. Paik, C. Gingell, E. Moreira, and T. Wang. 2005. "Sexual Problems among Women and Men Aged 40–80 Y: Prevalence and Correlates Identified in the Global Study of Sexual Attitudes and Behaviors." *International Journal of Impotence Research* 17 (1): 39-57.
- Lee, D. M., J. Nazroo, D. B. O'Connor, M. Blake, and N. Pendleton. 2016. "Sexual Health and Well-Being among Older Men and Women in England: Findings from the

- English Longitudinal Study of Ageing." *Archives of Sexual Behavior* 45 (1): 133-144.
- Lindau, S. T., L. P. Schumm, E. O. Laumann, W. Levinson, C. A. O'Muircheartaigh, and L. J. Waite. 2007. "A Study of Sexuality and Health among Older Adults in the United States." *New England Journal of Medicine* 357 (8): 762-774.
- Malta, S. 2007. "Love Actually! Older Adults and Their Romantic Internet Relationships." *Australian Journal of Emerging Technologies and Society* 5 (2): 84-102.
- . 2012. "Using Online Methods to Interview Older Adults About Their Romantic and Sexual Relationships." In *Researching Later Life and Ageing - Expanding Qualitative Research Horizons*, edited by M Leontowisch, 146-172. Basingstoke: Palgrave Macmillan.
- . 2013. "Love, Sex and Intimacy in New Late-Life Romantic Relationships " Doctoral dissertation, Swinburne University of Technology, Melbourne, Australia. Retrieved from http://www.researchbank.swinburne.edu.au/vital/access/manager/Repository/swin:35671?search=&query=Sue+Malta&f0=sm_type%3A%22Thesis+%28PhD%29%22.
- McWilliams, S., and A. E. Barrett. 2014. "Online Dating in Middle and Later Life Gendered Expectations and Experiences." *Journal of Family Issues* 35 (3): 411-436.
- Minichiello, V., D. Plummer, and A. Seal. 1996. "The 'Asexual' Older Person? Australian Evidence." *Venereology* 9 (3): 180-188.
- Mitchell, K., K. Wellings, G. Elam, B. Erens, K. Fenton, and A. Johnson. 2007. "How Can We Facilitate Reliable Reporting in Surveys of Sexual Behaviour? Evidence from Qualitative Research." *Culture, Health & Sexuality* 9 (5): 519-531.
- Mitchell, K. R., C. H. Mercer, G. B. Ploubidis, K. G. Jones, J. Datta, N. Field, A. J. Copas, C. Tanton, B. Erens, and P. Sonnenberg. 2013. "Sexual Function in Britain: Findings from the Third National Survey of Sexual Attitudes and Lifestyles (Natsal-3)." *The Lancet* 382 (9907): 1817-1829.
- Moreira Jr, E. D., D. B. Glasser, R. King, F. G. Duarte, C. Gingell, and for the GSSAB Investigators' Group. 2008. "Sexual Difficulties and Help-Seeking among Mature Adults in Australia: Results from the Global Study of Sexual Attitudes and Behaviours." *Sexual Health* 5 (3): 227-234.
- Nicolosi, A., E. O. Laumann, D. B. Glasser, E. D. Moreira Jr, A. Paik, and C. Gingell. 2004. "Sexual Behavior and Sexual Dysfunctions after Age 40: The Global Study of Sexual Attitudes and Behaviors." *Urology* 64 (5): 991-997.
- Public Health England. 2016. "Table 2: New Sti Diagnoses & Rates by Gender, Sexual Risk & Age Group, 2011-2015." Accessed October 10 2016. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/534555/2015_Table_2_New_STI_diagnoses___rates_by_gender___sexual_risk___age_group___2011-2015.pdf.
- Reimondos, A., A. Evans, and E. Gray. 2011. "Living-Apart-Together (LAT) Relationships in Australia." *Family Matters* 87: 43-55.

- Richters, J., P. B. Badcock, J. M. Simpson, D. Shellard, C. Rissel, R. O. de Visser, A. E. Grulich, and A. M. Smith. 2014. "Design and Methods of the Second Australian Study of Health and Relationships." *Sexual Health* 11 (5): 383-396.
- Salomon, J. A., H. Wang, M. K. Freeman, T. Vos, A. D. Flaxman, A. D. Lopez, and C. J. Murray. 2013. "Healthy Life Expectancy for 187 Countries, 1990–2010: A Systematic Analysis for the Global Burden Disease Study 2010." *The Lancet* 380 (9859): 2144-2162.
- Sandberg, L. 2013. "Just Feeling a Naked Body Close to You: Men, Sexuality and Intimacy in Later Life." *Sexualities* 16 (3-4): 261-282.
- Smith, A. M. A., C. E. Rissel, J. Richters, A. E. Grulich, and R. O. Visser. 2003. "Sex in Australia: The Rationale and Methods of the Australian Study of Health and Relationships." *Australian and New Zealand Journal of Public Health* 27 (2): 106-117.
- Sturges, J. E., and K. J. Hanrahan. 2004. "Comparing Telephone and Face-to-Face Qualitative Interviewing: A Research Note." *Qualitative Research* 4 (1): 107-118.
- Syme, M. L., T. J. Cohn, and J. Barnack-Tavlaris. 2016. "A Comparison of Actual and Perceived Sexual Risk among Older Adults." *Journal of Sex Research* 54 (2): 149-160.
- Tennant, R., L. Hiller, R. Fishwick, S. Platt, S. Joseph, S. Weich, J. Parkinson, J. Secker, and S. Stewart-Brown. 2007. "The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Development and Uk Validation." *Health and Quality of Life Outcomes* 5: 63.
- The Kirby Institute. 2014. "HIV, Viral Hepatitis and Sexually Transmissible Infections in Australia Annual Surveillance Report." In Sydney NSW 2052: The Kirby Institute, UNSW.
- Tillman, J. L., and H. D. Mark. 2015. "HIV and STI Testing in Older Adults: An Integrative Review." *Journal of Clinical Nursing* 24 (15-16): 2074-2095.
- Tisdell, E. J., and S. B. Merriam. 2015. *Qualitative Research: A Guide to Design and Implementation*. Fourth ed. San Francisco, CA: Wiley.
- Tolonen, H., A. Dobson, and S. Kulathinal. 2005. "Effect on Trend Estimates of the Difference between Survey Respondents and Non-Respondents: Results from 27 Populations in the WHO Monica Project." *European Journal of Epidemiology* 20 (11): 887-898.
- Wigginton, B., C. Moran, M. L. Harris, D. Loxton, and J. Lucke. 2016. "Young Australian Women Explain Their Contraceptive Choices." *Culture, Health & Sexuality* 18 (7): 727-741..
- World Health Organization. 2016. "Definition of an Older or Elderly Person." Accessed 14 October 2016. <http://www.who.int/healthinfo/survey/ageingdefolder/en/>.

Table 1

Recruitment strategies and timeline

Recruitment Method	Description	Timeline
Media – including print and radio	Interviews were conducted on national and local radio stations; articles about the study were published in a variety of mainstream (e.g., The Age in Melbourne, the Sydney Morning Herald in Sydney and The Conversation) and targeted (e.g., Starts at Sixty and OverSixty) news sources; press releases	July-August 2015
Ageing organisations	Study advertisements were sent to a large number of national and local ageing and aged care organisations. Many of these organisations promoted the study via their newsletters, websites and social media accounts.	July-August 2015
Mail outs	A letter describing the study and study advertisements were distributed to organisations for promotion. These included senior citizens and services clubs (n=242), all local governments in Australia (n=563), sexual health clinics (n=99) and HIV organisations (n=13)	August-November 2015
An online dating site	Study advertisements were placed on an online dating site that is popular with the over 60s	September 2015
Face-to face events	Study advertisements and hard copies of the survey were distributed at a number of events including a seniors festival in Melbourne, conferences focusing on older people and an event focusing on older people and sexuality	September-October 2015
Paid Facebook advertising	Advertisements, with direct links to the survey, were placed on Facebook that were targeted to all Australians aged 60 years and older	November-December 2015

Table 2

Source of recruitment for Sex Age and Me quantitative survey sample (n=2,137)

Source of recruitment	% (n)
Newspaper	3.0 (65)
Magazine	1.5 (32)
Radio	8.0 (170)
TV	0.2 (5)
Newsletter	2.2 (47)
Facebook	53.2 (1,136)
Twitter	0.5 (11)
Blog	0.7 (15)
Online forum	6.2 (132)
Online dating service	0.6 (13)
Website	13.2 (281)
From a friend	2.3 (48)
From a family member	0.8 (17)
From a GP or other health professional	0.6 (12)
From an organisation or club of which I'm a member	5.2 (111)
Other	5.9 (127)
Not reported	1.1 (24)

*Participants could report more than one source

Table 3

Comparison of Sex, Age and Me quantitative survey sample profile with Australian Bureau of Statistics data

Characteristic	ABS	Sample
	%	%
State/Territory ^{a b}		
New South Wales	33.2	31.1
Victoria	24.9	24.4
Queensland	19.4	19.1
Western Australia	9.8	9.3
South Australia	8.1	9.1
Australian Capital Territory	1.4	3.4
Tasmania	2.7	3.0
Northern Territory	0.6	0.7
Gender ^a		
Male	47.3	67.7
Female	52.7	32.0
Other	(not collected)	0.4
Age ^a		
60-64	26.5	40.7
65-69	23.8	34.3
70-74	17.7	15.6
75-79	13.1	5.8
80-84	9.3	2.6
85+	9.7	1.0
Marital status ^c		
Married	62.6	50.4
de Facto / cohabitation	3.8	10.2
Not married	33.6	39.4
Highest level of education ^c		
University	19.2	44.8
Non-university tertiary	58.3	31.9
Other	22.5	23.3

^a The ABS estimates for state, gender and age group were the final estimated residential population as at 30 June 2015 (restricted to 60+ years) (Australian Bureau of Statistics (ABS) 2016a)

^b State or territory of residence was calculated based on participants who provided their residential postcode (n=1,297)

^c The ABS figures for social marital status and education were obtained from the 2011 Census of Population and Housing (restricted to 55+ years) (Australian Bureau of

Table 4

Sample profile of Sex, Age and Me qualitative interview participants (n=53)

Characteristic	No. of participants	%
Gender		
Male	30	56.7
Female	23	43.4
Age		
55-64	22	41.5
65-69	17	32.1
70-74	8	15.1
75-80	6	11.3
Sexual orientation		
Heterosexual	47	88.7
Gay	1	1.9
Bisexual	4	7.5
Lesbian	1	1.9
Relationship status		
Married ^a	19	35.8
In a relationship ^b	13	24.5
Widow	3	5.7
Single ^c	13	24.5
Open or non-monogamous relationship ^d	5	9.4

^a One married participant also reported being in an open relationship

^b 'In a relationship' refers to participants who were in an established, long-term relationship, including de-facto relationships, those living apart together, and a long-distance relationship.

^c One 'single' participant reported that he was in what he considered to be a long-term relationship as a client of a sex worker.

^d Open or non-monogamous relationships included those who had multiple partners at the same time. This included a participant with three simultaneous partners, and participants with one 'main' partner who had sexual relationships with others.

The logo for the 'Sex, Age and Me' project features the words 'SEX', 'AGE', '&', and 'ME' in a bold, rounded, sans-serif font. 'SEX' is purple, 'AGE' is teal, '&' is orange, and 'ME' is orange. The text is centered horizontally and has a subtle drop shadow.

Figure 1. Sex, Age and Me project logo