

Using social networking sites to recruit participants: methods of an online survey of sexual health, knowledge and behaviour of young South Australians

Stephen Harfield,^{1,2} Salenna Elliott,¹ Liam Ramsey,³ Tambri Housen,² James Ward^{1,4,5}

Most sexually transmitted infections (STIs) are easy to detect and treat but can lead to serious sexual and reproductive health consequences if left untreated.¹⁻³ In Australian young people, rates of STIs are increasing and disproportionately affect Aboriginal and Torres Strait Islander communities.^{4,5} It is important to understand key clinical, social and behavioural factors underlying STIs to allow trends to be interpreted and assist in the development and design of public health interventions aimed at addressing STIs among young Australians. Cross-sectional surveys are a commonly used method for the collection of sexual health, knowledge and behaviour of young people at a point in time.⁶⁻⁸ If these types of surveys are collected regularly using similar methods, they also enable an assessment of trends over time.

Social networking sites (SNS) are increasingly being used to recruit research participants, particularly for online surveys, and have been an effective mechanism to recruit diverse and hard-to-reach populations and for topics considered to be sensitive, such as sexual health.⁶⁻⁹ However, there is limited evidence to indicate how effective SNS have been in recruiting a large proportion of Indigenous participants. Studies using SNS to recruit participants do not actively seek Indigenous participants and therefore average a participation rate of 1–3% among Indigenous people.^{6,7,10-12} This approach can often mean that there are insufficient data to enable

Abstract

Objective: To describe the methods of recruitment and demographic results of an online sexual health survey using social networking sites (SNS) to recruit people aged 16–29 years in the state of South Australia (SA) during 2019.

Methods: A cross-sectional online survey titled ‘Let’s Talk About It’ using SNS (Facebook and Instagram) was administered between July and August 2019, targeting Aboriginal and Torres Strait Islander and non-Indigenous young people. The survey comprised questions on demographics information, sexual health knowledge, behaviours and healthcare access.

Results: During the data collection period, the study team closely monitored the demographics of participants and adjusted SNS messaging through paid advertising to increase the recruitment of under-represented population groups, especially Aboriginal people, males and regional and remote residents of SA. A total of 2,724 people accessed the survey predominately via Facebook during a six-week period between July and August 2019; 2,380 people were eligible and included in the analysis.

Conclusions and implications for public health: Even though SNS have been used previously in recruitment for sexual health issues, small adjustments to the study during recruitment were specifically made to include under-represented populations in the final study. Using SNS is an effective method for recruiting survey participants; during recruitment phases, additional strategies may be required to be inclusive of diverse and under-represented populations.

Key words: social networking sites, cross-sectional survey, Aboriginal and Torres Strait Islander people, young people, sexually transmissible infections and blood-borne viruses, South Australia

reporting and direct comparisons between Indigenous and non-Indigenous participants. This is a concern, as Indigenous populations are often disproportionately affected by disease and illness, such as STIs, compared to non-Indigenous populations.

This paper describes the piloting of an online survey, named *Let’s Talk About It 2019*, for South Australian young people aged 16–29 years. The aim of the study was to describe

current sexual health knowledge, behaviours and access to health services for STIs and bloodborne viruses (BBVs) and related issues among young South Australians aged 16–29 years, both Aboriginal and or Torres Strait Islander and non-Indigenous. This paper describes how SNS were used with paid advertising to recruit participants broadly reflective of the South Australian population in this age group and include sufficient

1. Wardliparingga Aboriginal Health Equity, South Australian Health and Medical Research Institute, South Australia

2. National Centre for Epidemiology & Population Health, The Australian National University, Australian Capital Territory

3. College of Medicine and Public Health, Flinders University, South Australia

4. School of Public Health, The University of Queensland

5. UQ Poche Centre for Indigenous Health, The University of Queensland

Correspondence to: Mr Stephen Harfield, Wardliparingga Aboriginal Health Equity, South Australian Health and Medical Research Institute, PO Box 11060, Adelaide, South Australia 5001; email: stephen.harfield@sahmri.com

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numbers of Aboriginal and Torres Strait Islander young people to allow for statistically valid comparisons to be undertaken.

Methods

Study design

This study was a cross-sectional survey of young South Australians aged between 16 and 29 years. The survey was conducted online using REDCap,¹³ a web-based application for managing research data, over a six-week period between July and August 2019. The study was led by an Aboriginal principal investigator and conducted by Aboriginal and non-Indigenous researchers.

A group of young people (n=8) were engaged and consulted, comprised of Aboriginal and/or Torres Strait Islander and non-Indigenous young people aged 16–29 years and including members of each gender. They were consulted on the appropriateness of survey questions, the study/survey name, preferred SNS, the use of an image over text-based advertisements including the use of emojis, and the marketing of the survey to various groups within this population.

Participant recruitment

Participants were recruited online via targeted marketing of the survey on SNS (Facebook and Instagram) using paid advertisements on the SNS accounts and website of the South Australian Health and Medical Research Institute (SAHMRI) and Young Deadly Free (YDF) – a sexual health promotion campaign for young Aboriginal and Torres Strait Islander people, managed by SAHMRI. The advertisements were shared by other organisations through their SNS accounts (SHINE SA and SAMEISH – South Australia Mobilisation + Empowerment for Sexual Health). In addition, emails about the survey were sent out among the SAHMRI Aboriginal Health Equity community including the SAHMRI Indigenous Collective (a forum for Aboriginal and Torres Strait Islander staff and students at the Institute), the South Australian Aboriginal Secondary Training Academy (a sporting and education program for Aboriginal high school students in SA) and SA Aboriginal Community Controlled Health Services sector.

The marketing of the survey used emojis representing intimacy, male and female genitals and the Aboriginal and Torres Strait Islander flags (Figures 1A and 1B). The following text was used in the advertisement of the survey:

Let's talk about it!

Aged 16–29 and live in SA? We want to hear from you!

By completing our anonymous survey on sex and relationships, you'll be in the running to win 1 of 10 \$100 gift vouchers.

As an incentive, the advertisement advised that participants had the opportunity to win one of ten \$100 gift vouchers. At the end of the survey, participants were invited to submit their email address to a separate database to enter the prize draw. To ensure anonymity, this component was not linked to the survey and could not be linked to an individual's survey response. Email addresses were deleted after the completion of the prize draw.

The marketing strategy was reviewed on a regular basis during the period when the survey was live and advertisements and posts were optimised and altered to achieve a sample that reflected the broader population in terms of gender and geographical location (urban, regional and remote areas), and to boost recruitment of Aboriginal and Torres Strait Islander people.

Participant eligibility

To be eligible, participants had to be a resident of SA, aged 16–29 years and provide consent to participate. There were no specified exclusion criteria. If participants did not meet the eligibility criteria they were exited from the survey.

Study questionnaire and data collection

The questionnaire used for the online survey was based on the questionnaire used for the GOANNA Survey and GOANNA Survey 2,^{14,15} and modified to make it suitable for both Aboriginal and/or Torres Strait Islander and non-Indigenous participants. The questionnaire sought information on demographic characteristics, knowledge of STIs and BBVs, previous diagnosis of an STI or BBV, risk behaviours for the acquisition of STIs and BBVs, use of health services for sexual health, and survey satisfaction. None of the questions was mandatory.

Data analysis and management

Data analyses included descriptive analysis and calculation of proportions, means and medians as appropriate. Counts fewer than five were reported as <5 and counts fewer than 10 were reported without a percentage. Data were cleaned and analysed using Stata

version 15¹⁶ and graphs generated using Microsoft Excel,¹⁷ and centrally managed at SAHMRI. Geographical location was classified using the Australian Bureau of Statistics Australian Statistical Geography Standard.¹⁸ Representativeness was calculated using 2016 population estimates from the Australian Bureau of Statistics¹⁹ and the chi-square goodness of fit test.

Ethics

Ethics approval for the study was received from the Aboriginal Human Research Ethics Committees, South Australia (04-18-797), Flinders University Social and Behavioural Research Ethics Committee (OH-00202) and the Australian National University Human Research Ethics Committee (2019/311).

Results

Marketing of a sexual health survey on social networking sites

Phase 1 – the initial recruitment strategy and paid advertisements on Facebook and Instagram – targeted young people aged 16–29 years (male and female) who lived in SA using Figure 1A (Table 1). An additional paid advertisement on Facebook was added targeting young people aged 16–29 years (male and female) who live in regional and remote SA using Figure 1A. Over the six-week period that the survey was live, survey participation was regularly monitored, and the marketing strategy was altered to achieve a sample that reflected the broader population of this age group by male and female gender, and geographical location (urban, regional and remote areas) as well as selective over-representation of Aboriginal and Torres Strait Islander people (Table 1).

Within the first four days of the survey being advertised on SNS, more than 400 young people had accessed the survey (Figures 3A and 3B). More than two-thirds were female, the median age was 18 years (interquartile range, IQR: 17–23 years) and only two participants were Aboriginal and/or Torres Strait Islander. As a result, the initial recruitment strategy was altered. Phase 2 – two additional paid advertisements on Facebook – were added, targeting: i) young males aged 16–29 who live in SA; and ii) young people aged 16–29 who live in SA with interest in Australian Aboriginal culture, history, language, National Aborigines and Islanders Day Observance Committee (NAIDOC) and reconciliation (as Facebook does not allow targeting based on ethnicity

or race; also the survey was live during NAIDOC week). Furthermore, to enhance the appeal to males, the background of the original image was changed to a navy blue colour and used specifically for targeting of the survey to males only (Figure 2) during Phases 2 and 3.

In total, AU\$890 was spent on paid advertising on SNS over the six-week period. During this period, the survey had a reach of 98,445 individuals (the number of individuals who saw the advertisement at least once), 173,452 impressions (the number of times the advertisement was displayed on screens), and 3,190 link clicks. This equals to AU\$0.009 per reach, AU\$0.005 per impression or AU\$0.28 per link click.

Participant recruitment and eligibility

In total, 2,724 people accessed the survey during a six-week period between July and August 2019. The majority (68%, n=1,859) of participants self-reported that they heard about and accessed the survey via Facebook, followed by Instagram (5%, n=144), other (1%, n=32), email (1%, n=14); not reported: 25%, n=688. Figures 3A & 3B show the number of people who accessed the survey by gender and Indigenous status, reflecting the modifications in the marketing strategy over the six weeks the survey was live. A noticeable increase in males occurred as a result of restricting the advertisement on Facebook. Although females were still able to access the survey, there was a plateau towards the end of the six weeks the survey was live. Additionally, there was a steady increase in Aboriginal and or Torres Strait Islander people who accessed the survey

following the targeting of individuals with an interest in Aboriginal history, cultural and language and the addition of the Aboriginal and Torres Strait Islander flags to the image. These changes were made simultaneously, so it is unknown what relative contribution each made to the recruitment of Aboriginal and Torres Strait Islander participants.

Among those who accessed the survey, 2,528 met the eligibility and consent criteria. However, 141 were excluded based on not completing basic demographic information or any other part of the survey. A further six participants were excluded: five provided postcodes not from SA and one was under the age of 16 (despite agreeing to the eligibility questions about age and residence in SA). In total, 2,380 survey participants were included in the analysis.

Participant demographics

Table 2 presents the characteristics of survey participants by Indigenous status. Overall, there were slightly more females (52%, n=1,228); the overall median age was 20 years (IQR:17-24 years) and fewer than half (44%, n=1,039) of participants were aged 16–19 years; almost three-quarters (72%, n=1,706) of participants identified as straight (heterosexual) and 17% (n=404) bisexual, 4% (n=92) gay, 3% (n=82) as unsure, 2% (n=44) other and 2% (n=42) lesbian; more than three-quarters (78%, n=1,861) were from the Adelaide urban area; and the majority were born in Australia (92%, n=2,189) and spoke English as their first language (96%, n=2,283). Most participants were not married (77%, n=1,828) and more than half (61%, n=1,445) lived with their parents. Almost two-thirds (62%, n=1,469) of participants were currently

Figure 1A & B: Images used for advertising of the survey on social networking sites, Jul-Aug 2019, South Australia, Let's Talk About It 2019.



Table 1: Marketing strategies and social networking site analytics, Let's Talk About It 2019.

Phase	Days	Participant recruitment demographics and advertisement settings	Figure	Social networking site	Account	Reach	Impressions	Post clicks
1	1-5	Young people aged 16-29 (male and female) who live in SA	1A	Facebook/Instagram	SAHMRI	18,720	29,123	1,155
	1-4	Young people aged 16-29 (male and female) who live in SA	1A	Facebook/Instagram	YDF	4,156	7,427	111
	1-9	Young people aged 16-29 (male and female) who live in regional and remote SA	1A	Facebook	YDF	2,169	3,657	0
2	5-15	Young males aged 16-29 who live in SA	1B (day 5) 2 (days 6-15)	Facebook	YDF	4,861	9,184	99
	6-15	Young males aged 16-29 who live in SA	1A	Facebook/Instagram	SAHMRI	8,028	11,554	271
	5-9	Young people aged 22-29 (male and female) who live in SA	1B	Facebook	YDF	2,928	7,801	191
	5	Young people aged 16-29 (male and female) who live in SA	2	Email	Aboriginal Health Equity	N/A	N/A	N/A
	7-15	Young people aged 16-29 (male and female) who live in SA with an interest in Australian Aboriginal culture, history, language, NAIDOC and reconciliation.	1B	Facebook	YDF	14,691	17,160	622
	7-15	Young males aged 16-29 who live in SA with an interest in Australian Aboriginal culture, history, language, NAIDOC and reconciliation.	2	Facebook	YDF	17,496	32,598	363
	3	16-44	Young males aged 16-29 who live in SA	2	Facebook	YDF	17,248	27,775
	16-44	Young people aged 16-29 (male and female) who live in SA with an interest in Australian Aboriginal culture, history, language, NAIDOC and reconciliation.	1B	Facebook	YDF	8,148	27,173	170

engaged in study, at high school (43%, n=637) and university – undergraduate level (38%, n=552); and more than one-third (37%, n=871) of participants had completed secondary education compared to tertiary (university) education (17%, n=401). More

than half (51%, n=1,204) were engaged in part-time/casual employment.

Ten per cent (n=231) of participants identified as Aboriginal and or Torres Strait Islander; most (73%, n=168) were female and the median age for Aboriginal and or Torres Strait Islander participants was 22 years (IQR:18-26 years). In comparison, fewer than half (49%, n=1,019) of non-Indigenous participants were female and the median age for all non-Indigenous participants was 21 years (IQR:17-24 years), see Table 2).

proportion of young people aged 16–19 years (44%) than those aged 20–24 years (34%) and 25–29 years (21%) compared to population estimates (27%, 37% and 37%, respectively; p -value<0.001). By geographical location, the overall sample had a higher proportion of urban young people (78%) than those from regional (16%) or remote areas (2%) compared to population estimates (78%, 19% and 3%, respectively; p -value=0.003), see Table 3.

The sample had a higher proportion of Aboriginal and or Torres Strait Islander young people (10% compared to 3%, respectively; p -value<0.001), see Table 3. Among this proportion of the sample, there were more females (73%) than males (24%), which is not consistent with the population estimates (50% split between females and males; p -value<0.001); and more urban participants than regional and remote (p -value<0.001); however, the sample had a similar proportion of participants by age group when compared to the population estimates (p -value=0.811).

Figure 2: Modified images used for advertising of the survey on social networking sites with navy blue background, South Australia, Let's Talk About It 2019.



Assessment of sample representativeness

The sample represents fewer than 1% of the total SA population in this age group. The overall sample had a slightly higher proportion of females (52%) than males (45%) compared to population estimates (49% and 51%, respectively; p -value<0.001; population estimates are not available for genders other than males and females). By age groups, the overall sample had a significantly higher

Acceptability

At the end of the survey, participants were asked two questions regarding survey satisfaction and preference. The first question was: *Did you find this survey easy to complete?* Of the 2,048 participants who responded to this question, 99% (n=2,029) responded with 'Yes'. Those who responded 'No' (1%, n=19), were asked to provide a reason as to why they found it difficult. The second question was: *What is your preferred way to complete a survey?* Of those who responded (n=2,047), overwhelmingly, 95% (n= 1,939) reported online as their preferred format to complete a survey. There was no difference by gender, age group and Indigenous status (data not shown).

Figure 3A: Young people who accessed the survey, by gender, Jul-Aug 2019, South Australia, Let's Talk About It 2019.

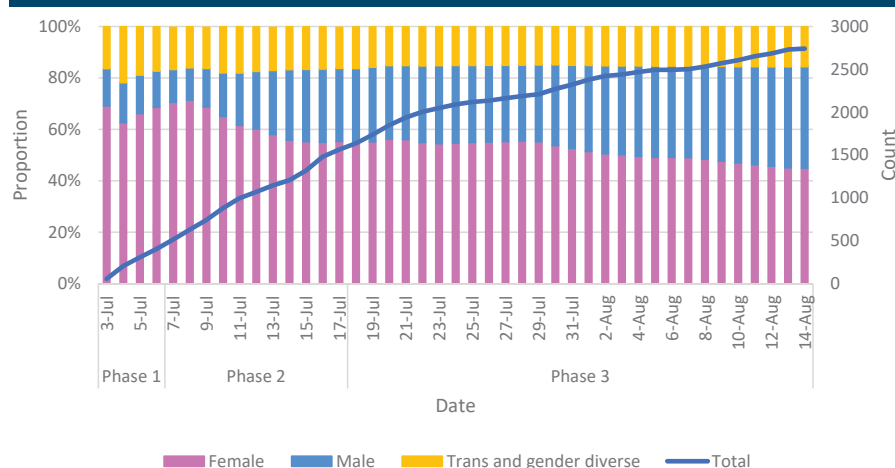
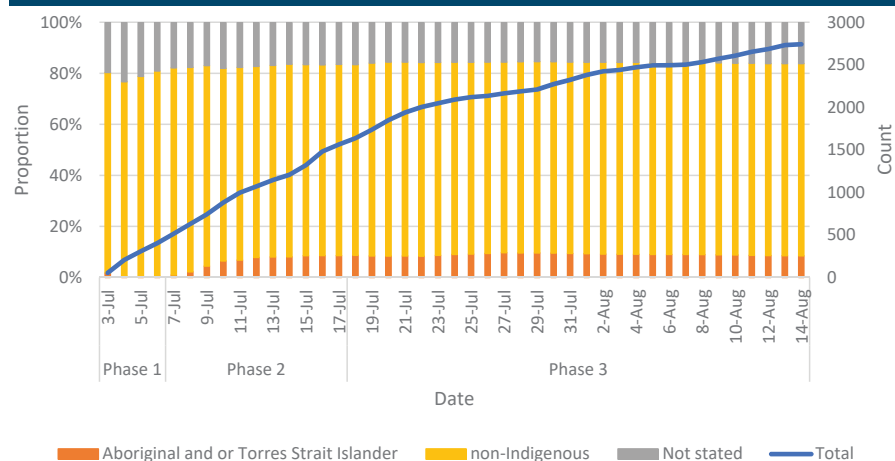


Figure 3B: Young people who accessed the survey, by Indigenous status, Jul-Aug 2019, South Australia, Let's Talk About It 2019.



Discussion

In total, 2,724 people accessed *Let's Talk About It 2019* during a six-week period between July and August 2019. The demographics of participants were monitored and SNS messaging and paid advertising were adjusted to address under-represented population groups especially Aboriginal people, males and regional and remote residents of South Australia.

Let's Talk About It 2019 data were collected over a relatively short time (six weeks) but yielded a substantial number of participants. The use of SNS to recruit survey participants was an effective strategy, ideal for recruiting participants for a study such as this. The

SNS advertisement was able to achieve a sizeable reach and generate a significant number of impressions that resulted in more than 3,000 survey link clicks. SNS have been demonstrated to be just as effective among other studies, particularly recruitment for clinical trials,²⁰⁻²³ interventions²⁴⁻²⁹ and surveys,^{30,31} and specifically for studies on subjects considered to be highly stigmatised, such as sexual health.^{6,7,9,22,25,32,33} There are several benefits and challenges to using SNS to recruit young people to participate in a sexual health survey. Most young people report having at least one form of a SNS account, primarily Facebook, and access it on a regular basis,^{34,35} providing fairly easy access to the targeted audience; Facebook and other SNS allow organisations to boost their exposure through paid advertisements to specific audiences using targeting capabilities – gender, age, location, interests and behaviours – for a specified time period,³⁶ and using SNS to recruit participants is often more cost-effective than more traditional methods.^{37,38} Additionally, the use of SNS allows individuals to determine when and where they access a survey. Participants can decide whether they participate without being pressured or coerced into participating. A survey such as *Let's Talk About It 2019*, which asked questions of a sensitive nature – sexual health, knowledge and behaviours – can be completed with anonymity in the place of their choice. One notable challenge of using paid advertisements on Facebook is that individuals cannot be targeted based on ethnicity or race, which for *Let's Talk About It 2019* was particularly challenging as the study aimed to deliberately include Aboriginal and Torres Strait Islander young people. This was achieved by using the Aboriginal and Torres Strait Islander flags on the marketing images and using the interest-targeting capability of Facebook, targeting individuals with an interest in Aboriginal and Torres Strait Islander culture, history, language, NAIDOC and reconciliation. These two strategies were effective to some degree; however, further research in this space is required.

The sample constituted fewer than 1% of the total SA population in this age group.¹⁹ Overall, sample characteristics such as gender and geographical location were reflective of these characteristics in the target population; however, the age distribution was skewed towards those aged 16–19 years. Selective targeting via paid advertisements on SNS was able to achieve the desired over-representation of Aboriginal and or Torres Strait Islander young people that will allow

Table 2: Survey participant characteristics by Indigenous status, South Australia, Let's Talk About It 2019.

	Indigenous status			
	Total All participants n (%)	Aboriginal and or Torres Strait Islander n (%)	Non-Indigenous n (%)	Not stated n (%)
Participants (n)	2,380	231	2,062	87
Gender				
Female	1,228 (52%)	168 (73%)	1,019 (49%)	41 (47%)
Male	1,078 (45%)	55 (24%)	980 (48%)	43 (49%)
Transgender	35 (1%)	<5	30 (1%)	<5
Gender diverse	29 (1%)	<5	27 (1%)	0
Not reported	10 (<1%)	<5	6	<5
Sexual identity				
Straight	1,706 (72%)	156 (68%)	1,484 (72%)	66 (76%)
Gay	92 (4%)	7	84 (4%)	<5
Lesbian	42 (2%)	<5	37 (2%)	<5
Bisexual	404 (17%)	49 (21%)	342 (17%)	13 (15%)
Unsure	82 (3%)	9	71 (3%)	<5
Other	44 (2%)	5	38 (2%)	<5
Not reported	10 (<1%)	<5	6	<5
Age group				
16-19 years	1,039 (44%)	76 (33%)	924 (45%)	39 (45%)
20-24 years	819 (34%)	85 (37%)	716 (35%)	18 (21%)
25-29 years	492 (21%)	66 (29%)	404 (20%)	22 (25%)
Not reported	30 (1%)	<5	18 (1%)	8
Geographical location				
Urban	1,861 (78%)	172 (74%)	1,631 (79%)	58 (67%)
Regional	385 (16%)	38 (16%)	332 (16%)	15 (17%)
Remote	55 (2%)	12 (5%)	41 (2%)	<5
Not reported	79 (3%)	9	58 (3%)	12 (14%)
Born in Australia				
Yes	2,189 (92%)	231 (100%)	1,880 (91%)	78 (90%)
No	175 (7%)	0	174 (8%)	<5
Not reported	16 (1%)	0	8	8
English first language				
Yes	2,283 (96%)	224 (97%)	1,978 (96%)	81 (93%)
No	86 (4%)	6	78 (4%)	2
Not report	11 (<1%)	1	6	4
Relationship status				
Married	104 (4%)	11 (5%)	88 (4%)	5
De-facto	427 (18%)	53 (23%)	360 (17%)	14 (16%)
Not married	1,828 (77%)	164 (71%)	1,599 (78%)	65 (75%)
Not reported	21 (1%)	<5	15 (1%)	<5
Living arrangements^a				
With parents	1,445 (61%)	91 (39%)	1,293 (63%)	61 (70%)
With partner	535 (22%)	60 (26%)	456 (22%)	19 (22%)
With children	142 (6%)	37 (16%)	103 (5%)	<5
Other family	480 (20%)	42 (18%)	415 (20%)	23 (26%)
Friends/housemate	313 (13%)	31 (13%)	277 (13%)	5
Alone	129 (5%)	24 (10%)	103 (5%)	<5
Currently studying				
Yes	1,469 (62%)	115 (50%)	1,299 (63%)	55 (63%)
No	900 (38%)	114 (49%)	756 (37%)	30 (34%)
Not reported	11 (<1%)	<5	7	<5
Study location				
High school	637 (43%)	39 (34%)	570 (44%)	28 (51%)
TAFE/college	144 (10%)	30 (26%)	107 (8%)	7
University – undergraduate	552 (38%)	33 (29%)	503 (39%)	133 (29%)
University – postgraduate	102 (7%)	6	93 (7%)	<5
Other	30 (2%)	7	23 (2%)	0
Not reported	<5	0	<5	<5

Continued over page

Table 2 cont.: Survey participant characteristics by Indigenous status, South Australia, Let's Talk About It 2019.

	Indigenous status			
	All participants n (%)	Aboriginal and or Torres Strait Islander n (%)	Non-Indigenous n (%)	Not stated n (%)
Highest level of education				
Primary school	37 (2%)	<5	33 (2%)	<5
Before year 10	30 (1%)	12 (5%)	17 (1%)	<5
Completed year 10	665 (28%)	60 (26%)	577 (28%)	28 (32%)
Completed year 12	871 (37%)	82 (36%)	771 (37%)	18 (21%)
TAFE/college	355 (15%)	52 (23%)	293 (14%)	10 (11%)
University – undergraduate	333 (14%)	16 (7%)	294 (14%)	23 (26%)
University – postgraduate	68 (3%)	<5	63 (3%)	<5
Not reported	21 (1%)	<5	14 (1%)	<5
Employment status				
Yes, part-time/casual	1,204 (51%)	73 (32%)	1,084 (53%)	47 (54%)
Yes, full-time	531 (22%)	54 (23%)	459 (22%)	18 (21%)
No	636 (27%)	102 (44%)	514 (25%)	20 (23%)
Not reported	9	<5	<5	<5

Notes:

Counts less than 5 are presented as <5 and counts less than 10 are reported without a percentage; percentages have been rounded up to the nearest whole number, columns may not equal 100%.

a: Participants were able to select all options that applied; therefore, the denominator is not the same.

for statistical comparisons. A participation rate of 10% Aboriginal and or Torres Strait Islander young people (equivalent to 2% of the SA Aboriginal and Torres Strait Islander population in this age group¹⁹) was achieved, of which the majority were female (75%) and from urban SA (77%); however, representative of all three age groups. This is a higher proportion than any other survey on sexual health and wellbeing of young people in Australia apart from the GOANNA survey, which exclusively surveyed Aboriginal and Torres Strait Islander people.^{14,15} All other surveys have averaged a participation rate of Aboriginal and Torres Strait Islander people between 2% and 3% or fewer.^{6-9,39,40} These data are often too small and can present several issues with representativeness, data analysis and interpretation. Small numbers of Aboriginal and Torres Strait Islander peoples in these surveys often result in outcomes not being published by Indigenous status or available to inform policy and programming or for shaping future research questions. The genuine inclusion of Aboriginal and Torres Strait Islander people in the conceptualisation and design of research projects that use surveys as their main form of data collection may address this issue. Additionally, other strategies may be required to ensure representativeness, such as the use of SNS to recruit participants. These could include more traditional methods, for example, the recruitment of participants and collection of surveys in person, such as those trialled with the GOANNA survey, via local engagement at community events with a

community organisation or the use of SNS to target Aboriginal and Torres Strait Islander participants more specifically. This is an issue that will require further consideration.

Similarly, selective targeting of males almost achieved representativeness, which is unusual in survey research. However, among Aboriginal and Torres Strait Islander participants, males were still markedly under-represented, suggesting additional strategies would need to be employed in future surveys to encourage participation by this demographic. Higher participation by younger people aged 16–19 years may reflect the appeal of the marketing or be related to SNS use. Under-representation by participants from regional and remote regions, particularly Aboriginal and Torres Strait Islander people, may indicate limitations of regional targeting or different patterns of SNS use; this remains unclear. Furthermore, it is unclear how representative the sample was of young people from culturally and linguistically diverse backgrounds and those not born in Australia, as the focus was on including a sufficient sample of Aboriginal and Torres Strait Islander young people to allow for comparison. Additional strategies may be required to recruit Aboriginal and Torres Strait Islander peoples and other populations under-represented in surveys such as this one – males, young people aged 20–24 and 25–29, those from regional and remote areas and young people from culturally linguistic and diverse populations. Additionally, the use of other SNS platforms or channels or partnering with young people-friendly/orientated

organisations or services and using a more comprehensive recruitment strategy may be more suitable to recruiting these population groups. However, Facebook is the most common using social networking site used by young people and was clearly effective in this circumstance for reaching young people.

Conclusion

Using SNS is an effective method for recruiting survey participants, particularly young people. A large sample of young South Australians aged 16–29 years was achieved over a relatively short period of time; however, additional strategies may be required to be inclusive of diverse and under-represented populations.

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Table 3: Survey participants (sample) compared to population estimates,^a South Australian person aged 16-29 years, by Indigenous status.

	All persons aged 16-29 years			Aboriginal and Torres Strait Islander			non-Indigenous		
	Survey participants n (%) ^b	Population estimates n (%)	p-value	Survey participants n (%) ^b	Population estimates n (%)	p-value	Survey participants n (%) ^b	Population estimates n (%)	p-value
Total	2,380	-			10,949	<0.001		304,705	<0.001
Gender									
Male	1,078 (47%)	160,712 (51%)	<0.001	55 (25%)	5,517 (50%)	<0.001	980 (49%)	155,195 (51%)	0.077
Female	1,228 (53%)	154,942 (49%)		168 (75%)	5,432 (50%)		1,019 (51%)	149,510 (49%)	
Age groups									
16-19	1,039 (44%)	84,061 (27%)	<0.001	76 (33%)	3,567 (33%)	0.811	924 (45%)	80,494 (26%)	<0.001
20-24	819 (35%)	115,774 (37%)		85 (37%)	3,957 (36%)		716 (35%)	716 (35%)	
25-29	492 (21%)	115,819 (37%)		66 (29%)	3,425 (31%)		404 (20%)	112,394 (37%)	
Geographical location									
Urban	1,861 (81%)	245,806 (78%)	0.003	172 (77%)	6,082 (56%)	<0.001	1,631 (81%)	239,724 (79%)	0.021
Regional	385 (17%)	60,721 (19%)		38 (17%)	3,284 (30%)		332 (17%)	57,438 (19%)	
Remote	55 (2%)	9,127 (3%)		12 (5%)	1,584 (14%)		41 (2%)	7,543 (2%)	

Notes:

a: 2016 population estimates Australian Bureau of Statistics¹⁹

b: Survey participant count and percentages for gender, age group and geographical location excludes not reported.

Percentages have been rounded up to the nearest whole number, columns may not equal 100%.

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