

Perceptions and willingness concerning the collection of sexual orientation and gender identity data in Australian healthcare services

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ABSTRACT

Background. Despite growing recognition of the importance of collecting sexual orientation and gender identity (SOGI) data to improve healthcare access and equity for LGBTQA+ populations, uncertainty remains around how these data are collected, their perceived importance and individuals' willingness to disclose such information in healthcare settings. The aim of this study was to understand perceptions of the collection of data on sexual orientation and gender identity in healthcare settings across Australia, and individuals' willingness to provide this data. **Methods.** A cross-sectional online survey of 657 Australian residents was conducted to assess participants' attitudes towards SOGI data in healthcare settings, along with preferences for methods to collect these data. Statistical analyses included ANCOVA, Chi-squared tests and Wilcoxon signed-rank tests. **Results.** Participants generally recognised the importance of the collection of basic demographic data to support the provision of health services. Willingness to share SOGI data varied, with significant differences noted across gender, sexual orientation and cultural backgrounds. LGBTQA+ participants expressed greater willingness to provide SOGI data, but only in contextually appropriate situations, and preferred more inclusive data collection methods. **Conclusions.** The study shows a context-dependent willingness to provide SOGI data in health care, underscoring the need for sensitive data collection methods. Insights into SOGI data collection attitudes are vital for developing inclusive and respectful healthcare practices. Improved SOGI data collection can enrich healthcare outcomes for diverse groups, informing public health policies and practices tailored to LGBTQA+ needs.

Keywords: cultural competency, data collection, gender identity, health care disparities, health services, patient acceptance of health care, sexuality, SOGI.

Introduction

Disparities in health outcomes between LGBTQA+ (lesbian, gay, Bisexual, trans, queer, asexual) communities and the general population have been well-documented in Australia, including in sexual health, mental health, alcohol and other drug use, as well as physical health (Hill *et al.* 2020). Although these outcomes are the result of various factors – including minority stress – access to affirming, culturally safe and knowledgeable healthcare services has been highlighted as a key determinant of health equity for LGBTQA+ people (Kuzma *et al.* 2019; Nowaskie and Sowinski 2019).

An important aspect of providing such health care is the awareness of healthcare providers of the sexual orientation and gender identity of a service user (Grasso *et al.* 2019). Despite consistent reports of health disparities for LGBTQA+ populations, it is unclear if and how data on sexual orientation or gender identity is routinely collected in health and community settings (Cahill *et al.* 2014; Saxton *et al.* 2019). Yet, health data, including health-specific, lifestyle and demographic data, are used to shape clinical services, particularly in primary care, and are touted as a key contributor to improving the quality of care and health outcomes (Steele *et al.* 2004; de Lusignan and van Weel 2006; Griffiths *et al.* 2011).

Recently, researchers have also been linking large data sets to identify trends in health outcomes, and requirements for policy and service provision (Thompson *et al.* 2012; Vasiliadis *et al.* 2017). However, data on sexual orientation or gender identity are unevenly collected, and there is no certainty on how they are used to inform health and human services, public policy or community action (Maragh-Bass *et al.* 2017).

In addition to issues related to the collection of data on LGBTQA+ populations, there are pragmatic, ethical, social and legal implications of collecting and linking data (Ruberg and Ruelos 2020). Pragmatically, health practitioners reported feeling uncomfortable inquiring about a person's sexual orientation or gender identity or, alternatively, tend to assume service users are heterosexual and/or cisgender (Sherman *et al.* 2014; Wolff *et al.* 2017). For LGBTQA+ people, disclosing sexual orientation or gender identity in healthcare settings has ethical and privacy implications. It not only involves disclosing personal information, but also risks discrimination. Concealment of identities often occurs as a means of protecting individuals and communities against discrimination, exclusion and violence, as well as a means of managing individual internalised homo- and transphobia (Brooks *et al.* 2018; Scheffey *et al.* 2019).

As an example, an integrated review by Bjarnadottir *et al.* (2017) found that in the majority of reviewed studies, participants were willing to answer routine questions about their sexual orientation and perceived them to be collecting important information; however, fear of negative consequences was identified as a significant barrier. Furthermore, some health services may limit data collection of sexual orientation and gender identity due to concerns about potential 'backlash' from the general community (Cahill *et al.* 2014; Anderson *et al.* 2023). However, although there are no studies examining potential backlash in Australia, internationally, studies indicate that heterosexual and cisgender service users are less likely to understand the relevance of routine collection of sexual orientation and gender identity data, but most are willing to respond to such questions.

Willingness to respond, and perceived relevance of these questions, appears to depend on demographic factors, including age, with older LGBTQA+ people being less likely to provide such information (Fredriksen-Goldsen *et al.* 2017). This study examines perceptions and willingness regarding the collection of sexual orientation and gender identity (SOGI) data in Australian healthcare services, and explores demographic influences on these attitudes using an anonymous cross-sectional online survey to:

1. evaluate the perception of the importance of routinely collecting data in healthcare services on sexual orientation and gender identity across populations,
2. understand the extent to which people are willing to provide information on sexual orientation and gender identity for routine data collection in healthcare services,

3. understand preferences for the routine collection of data on sexual orientation and gender in healthcare services,
4. evaluate if demographic factors and current health services use and experience affect both willingness to provide and perceived importance of data on sexual orientation and gender identity.

Methods

Participants and recruitment

All Australian residents aged ≥ 18 years were eligible to participate in an anonymous cross-sectional online survey between May and July 2023. Participants were recruited through paid and unpaid advertisements on social media (Facebook, Instagram, Twitter). Additional recruitment of participants was through the market research panel service provided by Qualtrics LLC, which provided a quota sample of the Australian population. No formal power calculation was conducted due to the exploratory nature of the study.

Ethical approval for this research has been granted by the University of Technology Sydney Health and Medical Research Ethics Committee (ETH23-8032), and informed consent was collected from each participant at the start of the survey. Recruitment material, as well as the consent form, stated that the research project is about routine data collection in health services in Australia without specifically mentioning sexual orientation or gender identity to limit social desirability bias in answers and recruitment.

Variables

Demographics

Participants were asked about their age, sexual orientation, sex recorded at birth, gender identity, Aboriginal/Torres Strait Islander Status, country of birth and first language (see Table 1 for detailed description of each variable). A dichotomous variable, LGBTQA+ status, was created using the sexual orientation variable and gender identity/sex recorded at birth variables; please refer to Table 1 for an in-depth description of this process. It is acknowledged that this procedure may hide differences between subgroups; however, this approach was necessary due to small sample sizes for some sexual orientation and gender identity categories. For the purpose of analysis, country of birth and first language were also dichotomised.

Routinely collected data in healthcare settings

Participants were asked several questions in relation to routinely collected data in healthcare services, with general (family) practices being used as an example in the survey (see Fig. 1). In the first step, participants' perceptions of the importance of their doctor knowing personal information about them was gathered across three broad categories:

Table 1. Variables.

Variable	Description
Age	Measured in years. Free-text field with validation
Sexual orientation	- Straight/heterosexual - Gay - Lesbian - Bisexual - Prefer not to answer - I use a different term (with option to specify)
Sex recorded at birth	- Female - Male - Another term (with option to specify) - Prefer not to answer - Nor relevant
Gender identity	- Woman/female - Man/male - Non-binary - Prefer not to answer - I use a different term (with option to specify)
Aboriginal/Torres Strait Islander Status	Question was based on the Australian Bureau of Statistics Standard: Are you Aboriginal and/or Torres Strait Islander? - Yes, Aboriginal - Yes, Torres Strait Islander - Yes, Aboriginal and Torres Strait Islander - No
Country of birth	Drop-down list with countries provided by Qualtrics (note: this list contains 193 choices, which are not reproduced here)
First language	Selection in drop-down menu based on most common languages spoken in Australia as per Australian Bureau of Statistics: - English - Mandarin - Arabic - Cantonese - Vietnamese - Hindi - Greek - Spanish - Nepali - Italian - Korean - Not on the list? (with option to specify)
LGBTQA+ status	This variable was created using three variables: sexual orientation, sex recorded at birth and gender identity. All participants with a sexual orientation other than heterosexual were categorised as LGBTQA+, whereas heterosexuals were categorised as 'all other'. All participants where sex recorded at birth and gender identity was not consistent were recorded as LGBTQA+ (e.g. male recorded at birth and non-binary gender identity); when both were consistent, these were recorded as 'all other'.

1. Demographic information: name, date of birth or age, postal address, email address and Medicare number/expiry date.
2. Identity-related information: sexual orientation, gender and pronouns, and ethnicity, including whether the

- person identifies as an Aboriginal and Torres Strait Islander, and their first language and country of birth.
3. Health-related information: existing chronic conditions, allergies, and history of surgeries and major hospital stays.

In the second step, participants were asked about the perceived importance of a general practitioner knowing identity-related information to provide high-quality care. In both steps, each item requires a response on an individually-defined Likert-scale from 1 (not important at all) over 3 (moderately important) to 5 (very important).

In a final step, participants were presented with four separate options of asking service users about sexual orientation or gender identity (including pronouns), as part of routinely collecting data on registration forms at a medical practice. Participants were presented the options for each of the survey categories in a random order.

Statistical analyses

Analyses were conducted using IBM SPSS Statistics version 28. Frequencies and percentages were calculated for categorical variables, and means with standard deviation for continuous variables. Differences between groups regarding the importance of routinely collected data were analysed using analyses of covariance adjusting for age as relationships between age and importance, as well as between age and other demographic variables (e.g. sexual orientation) were identified. Willingness to provide information was analysed using multinomial logistic regressions with age as a covariate. Wilcoxon signed-rank and Friedman tests were used to analyse the options of asking about sexual orientation, gender identity and pronouns. All assumptions were met and violations of normality were handled through log-transformations. Statistical significance was interpreted to be present using the standard cut-off of 0.05.

Results

Sample characteristics

A total of 691 participants started the survey. Of these, 34 were excluded, as these did not provide data on key demographic variables, leading to a final sample size of 657 participants. Sample characteristics can be found in Table 2.

Perceived importance of routinely collected data (personal)

Table 3 presents the personal perceived importance of routinely collected data across three domains: (1) basic demographic information, (2) identity-related information, and (3) health-related information. Participants rated the importance of basic demographic information, such as name, date of birth and Medicare information, as relatively high,

Gender category options

Option 1: <u>Sex</u> <input type="checkbox"/> Man/Male <input type="checkbox"/> Woman/Female	Option 2: <u>Sex assigned at birth:</u> <input type="checkbox"/> Man/Male <input type="checkbox"/> Woman/Female
Option 3: <u>Sex assigned at birth:</u> <input type="checkbox"/> Man/Male <input type="checkbox"/> Woman/Female <u>Gender Identity:</u> <input type="checkbox"/> Man <input type="checkbox"/> Woman <input type="checkbox"/> Non-Binary <input type="checkbox"/> Other	Option 4: <u>Sex assigned at birth:</u> <input type="checkbox"/> Man/Male <input type="checkbox"/> Woman/Female <u>Gender identity:</u> Please enter here (e.g., man woman, non-binary,...): _____

Sexual orientation category options

Option 1: <u>Sexual orientation:</u> <input type="checkbox"/> Straight/Heterosexual <input type="checkbox"/> Other	Option 2: <u>Sexual orientation:</u> <input type="checkbox"/> Straight/Heterosexual <input type="checkbox"/> Gay/Lesbian <input type="checkbox"/> Bisexual <input type="checkbox"/> Other
Option 3: <u>Sexual orientation:</u> <input type="checkbox"/> Straight/Heterosexual <input type="checkbox"/> Gay/Lesbian <input type="checkbox"/> Bisexual <input type="checkbox"/> Other, please specify: _____	Option 4: <u>Sexual orientation:</u> Please specify (e.g., straight, gay/lesbian, bisexual,...): _____

Pronouns

Option 1: <u>Pronouns:</u> <input type="checkbox"/> He/Him <input type="checkbox"/> She/Her	Option 2: <u>Pronouns:</u> <input type="checkbox"/> He/Him <input type="checkbox"/> She/Her <input type="checkbox"/> They/Them <input type="checkbox"/> Other
Option 3: <u>Pronouns:</u> <input type="checkbox"/> He/Him <input type="checkbox"/> She/Her <input type="checkbox"/> They/Them <input type="checkbox"/> Other, please specify: _____	Option 4: <u>Pronouns:</u> Please enter here (e.g., he/him, she/her, they/them,...): _____

Fig. 1. Response options for routinely collected data on gender, sexual orientation and pronouns.

with low variability. Postal address and email address were considered less important with mean scores. Health-related information was also perceived to be very important to be routinely collected for existing chronic conditions, allergies, and history of surgeries and major hospital stays.

Identity-related information showed varying importance ratings by participants. Gender had the highest rating, followed by first language, whereas agreement for all other items was below three, with pronouns and sexual orientation being particularly low. Substantial differences between groups were detected for identity-related information. Women overall perceived the importance of routinely collecting data higher than men for Indigenous status (3.0, s.d. 1.5 vs 2.5, s.d. 1.5; $P < 0.001$), first language (3.5, s.d. 1.4 vs 3.1, s.d. 1.5; $P = 0.003$), country of birth (3.0, s.d. 1.4 vs 2.8, s.d. 1.4; $P = 0.033$) and pronouns (2.6, s.d. 1.5 vs 2.2, s.d. 1.4;

$P = 0.002$), whereas no significant difference could be found for collecting information about gender. Similarly, LGBTQA+ participants provided higher ratings than their heterosexual counterparts for Indigenous status (3.3, s.d. 1.5 vs 2.7, s.d. 1.5; $P = 0.027$), first language (3.7, s.d. 1.2 vs 3.3, s.d. 1.4; $P = 0.025$) and pronouns (3.5, s.d. 1.4 vs 2.3, s.d. 1.4; $P < 0.001$), but not country of birth, sexual orientation or gender. People born overseas provided lower ratings than those born in Australia for Indigenous status (2.5, s.d. 1.5 vs 2.8, s.d. 1.5; $P = 0.001$), first language (2.9, s.d. 1.5 vs 3.4, s.d. 1.4; $P < 0.001$), country of birth (2.5, s.d. 1.4 vs 3.1, s.d. 1.4; $P < 0.001$) and pronouns (2.3, s.d. 1.4 vs 2.5, s.d. 1.4; $P < 0.001$), whereas no differences were found for gender and sexual orientation. Indigenous Australians provided higher ratings for Indigenous status (3.7, s.d. 1.1 vs 3.3, s.d. 1.4; $P = 0.001$), country of birth (3.7, s.d. 1.3 vs 2.9, s.d. 1.4; $P = 0.004$) and sexual orientation

Table 2. Demographic characteristics.

Age	47.8 years (s.d. 18.3) Range: 18–89
Gender	
Man	47.8% (n = 314)
Woman	51.3% (n = 337)
Non-binary	0.9% (n = 6)
Sex recorded at birth	
Female	51.8% (n = 337)
Male	48.2% (n = 317)
Prefer not to say/not relevant	0.5% (n = 3)
LGBTQA+ status	
No	85.7% (n = 509)
Yes	11.1% (n = 66)
Prefer not to say	2.2% (n = 13)
Indigenous status	
Indigenous	4.6% (n = 30)
Non-Indigenous	95.4% (n = 618)
Country of birth	
Australia	77.7% (n = 509)
Other	22.3% (n = 146)
First language	
English	90.6% (n = 595)
Other	8.7% (n = 57)

(3.0, s.d. 1.5 vs 2.4, s.d. 1.3; $P = 0.025$), but not for first language, gender or pronouns.

Table 3. Importance of routinely collected data (personally).

Broad category	Item	Mean (s.d.)			Test statistic ^A
		Sample	LGBTQA+	Non- LGBTQA+	
Identity-related information	Aboriginal and Torres Strait Islander Status	2.8 (1.5)	3.3 (1.5)	2.7 (1.5)	$F(1606) = 4.907, P = 0.027$
	First language	3.3 (1.4)	3.7 (1.2)	3.3 (1.4)	$F(1607) = 5.066, P = 0.025$
	Country of birth	2.9 (1.4)	3.2 (1.3)	2.9 (1.4)	$F(1606) = 1.329, P = 0.250$
	Gender	3.9 (1.2)	3.9 (1.1)	4.0 (1.2)	$F(1606) = 0.001, P = 0.973$
	Pronouns	2.5 (1.3)	3.4 (1.4)	2.3 (1.4)	$F(1606) = 26.148, P < 0.001$
	Sexual orientation	2.5 (1.3)	2.7 (1.3)	2.5 (1.4)	$F(1606) = 1.049, P = 0.306$
Basic demographic information	Name	4.4 (0.9)	4.5 (0.9)	4.4 (0.9)	$F(1606) = 2.187; P = 0.140$
	Date of birth/age	4.3 (0.9)	4.2 (1.0)	4.3 (0.9)	$F(1610) = 0.194, P = 0.660$
	Postal address	3.5 (1.3)	3.2 (1.3)	3.5 (1.3)	$F(1606) = 0.342, P = 0.559$
	Email address	3.3 (1.3)	3.2 (1.3)	3.3 (1.3)	$F(1605) = 0.105, P = 0.746$
	Medicare number and expiry date	4.4 (0.9)	4.3 (0.9)	4.4 (0.9)	$F(1606) = 0.297, P = 0.586$
Health-related information	Existing chronic conditions	4.6 (0.7)	4.7 (0.7)	4.6 (0.7)	$F(1607) = 1.331, P = 0.249$
	Allergies	4.6 (0.7)	4.7 (0.7)	4.6 (0.7)	$F(1607) = 0.192, P = 0.662$
	History of surgeries and major hospital stays	4.5 (0.8)	4.4 (0.9)	4.5 (0.8)	$F(1607) = 1.148, P = 0.284$

^AAnalysis of covariance (adjusted for age).

Importance of knowing identity-related information for high-quality care

Participants were then asked how important it is for a doctor to know identity-related information for the provision of high-quality care in general (See Table 4). Gender was overall perceived to be important, followed by first language and Indigenous status. Mean ratings <3 were given for country of birth, sexual orientation and pronouns. Significant differences in perceptions were observed between subgroups. Women overall perceived that Indigenous status, and first language and pronouns are more important for high-quality care than men. LGBTQA+ participants also perceived that Indigenous status, and first language and pronouns are more important for high-quality care than their heterosexual counterparts. Indigenous Australians overall perceived Indigenous status, and country of birth and sexual orientation to be more important than their non-Indigenous counterparts. Finally, people born overseas rated Indigenous status, first language, country of birth and pronouns to be less important for high-quality care than their Australian-born counterparts.

Willingness to provide identity-related information

Participants were also asked about their willingness to provide identity-related information (see Table 5), with two-thirds or more willing to provide identity-related information for all items, with agreement ranging starkly from approximately two-thirds for sexual orientation and pronouns to ≥80% for all other categories (Aboriginal and Torres Strait Islander Status, first language, country of birth and gender). A further meaningful proportion of participants is willing to provide information depending on how the information is asked for,

Table 4. Importance of knowing identity-related information for health professionals.

	Importance to know for health professionals to provide high-quality care, mean (s.d.)			Test statistic ^A
	Sample	LGBTQA+	Non-LGBTQA+	
Aboriginal and Torres Strait Islander status	3.0 (1.5)	3.5 (1.4)	3.0 (1.4)	$F(1606) = 4.642, P = 0.032$
First language	3.1 (1.4)	3.7 (1.4)	3.1 (1.4)	$F(1606) = 7.383, P = 0.007$
Country of birth	2.9 (1.4)	3.2 (1.3)	2.9 (1.4)	$F(1606) = 0.834, P = 0.362$
Gender	3.7 (1.2)	3.9 (1.0)	3.7 (1.3)	$F(1606) = 0.889, P = 0.364$
Pronouns	2.5 (1.4)	3.3 (1.4)	2.4 (1.4)	$F(1606) = 18.050, P < 0.001$
Sexual orientation	2.6 (1.3)	2.9 (1.2)	2.6 (1.4)	$F(1606) = 1.383, P = 0.240$

^AAnalysis of covariance (adjusted for age).**Table 5.** Willingness to provide identity-related information; % (n).

	Would provide			Would not provide			Depends how information is asked for			Test statistic ^A
	Sample	LGBTQA+	Non-LGBTQA+	Sample	LGBTQA+	Non-LGBTQA+	Sample	LGBTQA+	Non-LGBTQA+	
Aboriginal and Torres Strait Islander status	80.1% (486)	83.6% (51)	79.7% (435)	13.5% (82)	9.8% (6)	13.9% (76)	6.4% (39)	6.6% (4)	6.4 (35)	$\chi^2(4) = 3.769$, Nagelkerke $R^2 = 0.009, P = 0.438$
First language	82.6% (502)	86.9% (53)	82.1% (449)	13.3% (81)	6.6% (4)	14.1% (77)	4.1% (25)	6.6% (4)	3.8% (21)	$\chi^2(4) = 6.670$, Nagelkerke $R^2 = 0.016, P = 0.154$
Country of birth	85.3% (518)	83.6% (51)	85.5% (467)	11.2% (68)	9.8% (6)	11.4% (62)	3.5% (21)	6.6% (4)	3.1% (17)	$\chi^2(4) = 3.886$, Nagelkerke $R^2 = 0.010, P = 0.422$
Gender	86.7% (526)	86.9% (53)	86.6% (473)	10.0% (61)	3.3% (2)	10.8% (59)	3.3% (20)	9.8% (6)	2.6% (14)	$\chi^2(4) = 12.260$, Nagelkerke $R^2 = 0.033, P = 0.016$
Pronouns	66.7% (405)	72.1% (44)	66.1% (361)	20.4% (78)	11.5% (7)	21.4% (117)	12.9% (78)	16.4% (10)	12.5% (68)	$\chi^2(4) = 14.546$, Nagelkerke $R^2 = 0.029, P = 0.006$
Sexual orientation	67.4% (409)	54.1% (33)	68.9% (376)	21.7% (132)	23.0% (14)	21.6% (118)	10.9% (66)	23.0% (14)	9.5% (52)	$\chi^2(4) = 11.496$, Nagelkerke $R^2 = 0.023, P = 0.022$

^AMultinomial logistic regression (age as covariate).

particularly in regard to sexual orientation and pronouns. Differences in willingness to provide this information were also detected between subgroups for Aboriginal and Torres Strait Islander Status, gender, pronouns and sexual orientation, but not for first language and country of birth. In regard to Aboriginal and Torres Strait Islander Status, non-Indigenous participants were more likely ($P < 0.001$) to be willing to provide this information than their Indigenous counterparts, with 56.0% ($n = 14$) compared with 80.4% ($n = 477$), whereas 24% ($n = 6$) of Indigenous participants stated they would be willing to provide this information depending on the context or situation compared with 5.9% ($n = 35$) among their non-Indigenous counterparts. Participants born overseas were overall more likely to provide this information than their Australian-born counterparts (85.7, $n = 120$ vs 77.6%, $n = 371$; $P = 0.001$). Regarding gender, sexual orientation did not impact willingness to provide this information; however, LGBTQA+ participants were less likely ($P = 0.016$) to state that they would not provide this information (3.3%,

$n = 2$ vs 10.8%, $n = 59$), but would rather decide this based on the situation or context (9.8%, $n = 6$ vs 2.6%; $n = 14$). Those born overseas were more likely to be willing to provide this information, with 92.1% ($n = 128$) and 84.8% ($n = 406$; $P = 0.010$), respectively.

Regarding pronouns, men were less likely ($P = 0.003$) to state that they would provide this information compared with women, with 62.5% ($n = 183$) and 70.5% ($n = 227$), respectively, while being more likely to make this decision depending on the situation or context (16.0%, $n = 47$ vs 9.3%, $n = 30$). Only 20.1% ($n = 119$) of non-Indigenous participants stated that they would not provide this information, compared with 42.3% ($n = 11$) among Indigenous participants ($P = 0.016$). LGBTQA+ people were less likely ($P = 0.022$) to provide information about their sexual orientation than their heterosexual counterparts, with 54.1% ($n = 33$) and 68.9% ($n = 376$), respectively, and were more likely to make this decision based on the context or situation (23.0%, $n = 14$ vs 9.5%, $n = 52$).

Preferences regarding data collection on gender, sexual orientation and pronouns

In regard to preferences regarding the collection of data on gender, sexual orientation and pronouns, significant differences were found in the sample between different options with clear rankings for these (see Table 6). Regarding gender, the overall sample preferred gender options clearly marked as sex without differentiating between sex and gender identity. However, LGBTQA+ participants strongly preferred an option that has both sex assigned at birth and gender identity questions above those that do not. A similar pattern can be found in regard to pronouns, where the entire sample and heterosexual participants preferred options that included less choice and tick-boxes over write-in options. Again, LGBTQA+ participants strongly preferred options that provide more choice or are write-ins.

A slightly different pattern was found for sexual orientation questions, where the overall sample preferred options with more complexity, as long as these are not write-in only, although the simplest option only contained 'straight/heterosexual' and 'others', and an option with more choice plus a write-in was ranked equally by heterosexual participants. Again, options that provide more complexity were preferred by LGBTQA+ participants.

In an open-ended question at the end of the survey, participants noted the importance of allowing patients to tick a 'Prefer not to disclose' option, and highlighted the importance of a disclaimer that clearly outlines the justification or reason as to why these data are collected and how they will be used. Several participants also highlighted the importance of feeling comfortable as a determinant of disclosing their sexual orientation or gender identity, including when and where this information is provided.

Discussion

This study provides valuable insights into the perception and willingness of service users to provide data on sexual orientation and gender identity as part of the routine data collection at health services.

Participants showed varying levels of willingness to share identity-related information. Although basic demographic details were considered important, such as name and date of birth, other factors, such as sexual orientation and pronouns, were perceived as less important. Subgroup differences were observed, with female, LGBTQA+, Indigenous and overseas-born participants expressing distinct perspectives on data collection. Participants showed a significant willingness to share information, especially when considering the context in which the information was requested.

Willingness to provide information on pronouns did not differ significantly between the overall sample and LGBTQA+ participants; however, a significant difference was found for sexual orientation, with LGBTQA+ participants being less likely to be willing to provide this information than their non-LGBTQA+ counterparts, and more likely to base this decision on the context in which the information was asked. This is consistent with previous literature that identified that LGBTQA+ participants may be reluctant to provide this type of information for fear of discrimination and due to having higher levels of privacy concerns regarding this type of information (Barclay and Russel 2017; Bjarnadottir *et al.* 2017). This suggests that when such information is sought (e.g. on intake forms or within a consultation) and who is requesting it (and whether they are trusted) will impact the level and accuracy of identity-based data that can be collected from LGBTQA+ people in health settings.

Table 6. Mean ranks for gender and sexual orientation questions.

Category	Option	Full sample		Non-LGBTQA+		LGBTQA+ participants	
		Mean rank	Test statistic ^A	Mean rank	Test statistic ^A	Mean rank	Test statistic ^A
Gender	Option 1	2.13 (s.d.1.25)	$\chi^2 (3) = 107.610; P < 0.001$	2.03 (s.d. 1.2)	$\chi^2 (3) = 135.984; P < 0.001$	3.00 (s.d. 1.29)	$\chi^2 (3) = 26.893; P < 0.001$
	Option 3	2.36 (s.d.1.04)		2.41 (s.d. 1.05)		2.88 (s.d. .76)	
	Option 2	2.62 (s.d.0.86)		2.58 (s.d. 0.87)		1.95 (s.d. 0.90)	
	Option 4	2.90 (s.d. 1.12)		2.99 (s.d. 1.01)		2.18 (s.d. 1.10)	
Sexual orientation	Option 2	2.26 (s.d. 0.89)	$\chi^2 (3) = 127.083; P < 0.001$	2.25 (s.d. 1.23)	$\chi^2 (3) = 140.852; P < 0.001$	3.16 (s.d. 1.16)	$\chi^2 (3) = 26.421; P < 0.001$
	Option 3	2.35 (s.d. 1.01)		2.40 (s.d. 1.02)		2.46 (s.d. 1.03)	
	Option 1	2.35 (s.d. 1.25)		2.25 (s.d. 1.23)		1.91 (s.d. 0.82)	
	Option 4	3.05 (s.d. 1.11)		3.11 (s.d. 1.09)		2.14 (s.d. 1.11)	
Pronouns	Option 1	2.25 (s.d. 1.26)	$\chi^2 (3) = 67.183; P < 0.001$	2.17 (s.d. 1.23)	$\chi^2 (3) = 88.108; P < 0.001$	3.04 (s.d. 1.22)	$\chi^2 (3) = 18.442; P < 0.001$
	Option 2	2.39 (s.d. 0.85)		2.36 (s.d. 0.85)		2.64 (s.d. 0.76)	
	Option 3	2.48 (s.d.1.06)		2.53 (s.d. 1.06)		2.02 (s.d. 1.01)	
	Option 4	2.88 (s.d. 1.17)		2.95 (s.d. 1.15)		2.30 (s.d. 1.19)	

^AFriedman test.

The results underscore the importance of *how* information is collected, with participants expressing varying degrees of willingness to provide data based on the context or situation in which the data collection occurs. This points to the importance of data collection being approached in empathic, affirming and culturally safe ways (Brooks et al. 2018; Ogden et al. 2020). It has been suggested that normalising discussions about sexuality and gender, and ensuring privacy, can encourage open communication (Braybrook et al. 2023). However, normalisation of identity data may also be a key aspect of context.

Discussions about sexual orientation and gender identity in routine data collection may be important for reducing stigma and fostering an inclusive healthcare environment (Maragh-Bass et al. 2017). Studies have shown that, when such data are collected as a matter of standard practice, it becomes a part of the healthcare landscape, eliminating the fear and hesitancy associated with disclosing this information (Aspinall and Mitton 2008; Cahill et al. 2014; Mansh et al. 2019). These findings may also suggest the presence of an ongoing need for health services and/or health providers dedicated to LGBTQA+ communities. Prior research has shown that LGBTQA+ patients often feel more comfortable disclosing sensitive information when interacting with healthcare providers who are perceived as queer/trans-friendly or are themselves members of these communities (McNeil et al. 2012; Kcomt 2019).

Another crucial outcome of collecting data on sexual orientation and gender identity is the avoidance of hetero- and cis-normative assumptions and misgendering. Hetero- and cis-normativity occur when service users are all presumed to be heterosexual and cisgender, which erases the experiences and needs of sexuality and gender diverse people. Misgendering is a harmful practice related to cis-normativity, where individuals are assumed cisgender and referred to using incorrect gender pronouns or identifiers. Studies have consistently demonstrated that such assumptions negatively impact on the relationship between healthcare professionals and service users, and increase barriers to accessing healthcare in future, as well as leading to suboptimal healthcare provision to LGBTQA+ people (Logie et al. 2019; Tabaac et al. 2019; Bracho Montes de Oca et al. 2021). Collecting data may assist in challenging and correcting such assumptions and practices by ensuring that healthcare providers are aware of and respectful of each individual's identity (Wolff et al. 2017).

Strength and limitations

This is the first comprehensive study researching the perception and willingness of participants to provide data on sexual orientation and gender identity in the context of the Australian healthcare system. Although this study is limited by the self-selective nature of the sample, the sample composition is a quota sample representative of the demographics of the Australian population. Further measurements were taken to avoid social desirability bias in responses by stating that the research project is about routine data collection in health

services in Australia without specifically mentioning sexual orientation or gender identity. The sample size did not allow for in-depth analyses of differences for trans and gender diverse respondents due to small sample sizes.

Conclusions

Collecting personal data requires a focus on ensuring privacy, and providing clear explanations to service users regarding data collection and use. In the healthcare context, privacy is paramount, and service users need to feel safe and secure in sharing their personal information. Offering a transparent explanation of why data are collected also helps alleviate concerns and builds trust between service users and healthcare providers, and may reduce the discomfort experienced by health professionals when dealing with LGBTQA+ people.

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Data availability. The data that support this study will be shared upon reasonable request to the corresponding author.

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