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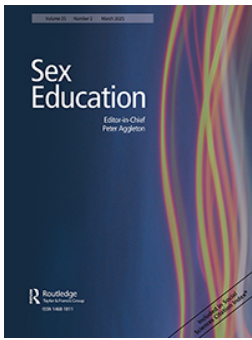
The diverse but common definitions of sex for young people in Australia

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The diverse but common definitions of sex for young people in Australia

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ABSTRACT

Relationships and sexuality education is a key strategy for promoting safe sex and respectful relationships during adolescence. Understanding the ways in which young people define sex is critical to ensuring a shared understanding between sexual health educators and students. Young people aged 14–18 years ($N = 6,043$) who participated in a large-scale cross-sectional Australian study were asked to indicate whether various sexual practices (e.g. vaginal, anal or oral sex, genital rubbing, mutual masturbation) were included in their definition of 'sex'. Associations between demographic characteristics, sexual experiences, and definitions of sex were identified using multiple logistic regression. Content analysis further examined open-text responses from 63 participants who expanded on their definitions. Almost all participants (99.1%) included vaginal sex in their definition of sex, 83.7% included anal sex and 59.7% included oral sex. Young people also included a diverse range of sexual practices that did not consistently align with common definitions used in sexuality education and sexual health promotion campaigns. Definitions of sex differed by gender and sexuality suggesting that when discussing sex with young people, educators and health professionals need to consider sexuality and gender diversity and take care to check common understanding of terminology.

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Adolescence; sexual health; definitions; education

Introduction

The definition and meaning of sexual activity or 'sex' has important implications for the promotion and education of sexual health and sexual wellbeing. With young people accounting for 70% of Chlamydia notifications in Australia (King et al. 2022), school-based relationships and sexuality education (otherwise known as sexuality education) plays an important role in supporting the health and wellbeing of young people. Sexuality education necessarily involves in-depth discussions about sexual practices and processes that can ensure physically and emotionally safe sexual encounters, including STI prevention. The ways in which young people define sex (and what they consider to be 'real' sex) are central to these conversations and have implications for whether young people

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consider sexuality education to be relevant to them (Rubinsky and Cooke-Jackson 2018; Martos 2016; McPhillips, Braun, and Gavey 2001).

Conventionally, the term 'sex' has been used in reference to vaginal and, to a lesser extent, anal intercourse, with other sexual practices being referred to as 'foreplay' or 'outercourse' (Bakaroudis 2014). For example, research focusing primarily on heterosexual men and women found that when provided with a list of sexual behaviours or scenarios, over 90% of the participants considered penile-vaginal intercourse to be sex (Bersamin et al. 2007; Bogart et al. 2000; Barnett et al. 2017) and around 80% included penile-anal intercourse to be sex (Bersamin et al. 2007; Sanders and Machover Reinisch 1999; Barnett et al. 2017). Although less common, broader definitions of sex have also been reported. Around 30–40% of the participants in various studies (Bersamin et al. 2007; Bogart et al. 2000; Sanders and Machover Reinisch 1999; Barnett et al. 2017; Hans and Kimberly 2011) include oral sex in their definition of sex. When prompted by a list of sexual practices, some participants also included genital touching (Bersamin et al. 2007; Barnett et al. 2017; Hans and Kimberly 2011) and achieving orgasm (Bogart et al. 2000; Barnett et al. 2017). Faulkner (2003) conducted in-depth interviews with 31 young Latina women and found that one-third of the sample included, as one participant stated, 'virtually anything ... open to interpretation' (p. 184) with participants naming massage, kissing, flirting, and caressing in their definitions of sex. Research that includes the perspectives of non-heterosexual people tends to capture more diverse definitions of sex. Studies with lesbian, gay, bisexual, transgender and queer (LGBTQ+) populations have found oral sex, genital stimulation and using sex toys are often included in participants' definitions, contrary to the abovementioned studies which relied primarily on heterosexual samples (Dion and Boislard 2022; Horowitz and Spicer 2013; McPhillips, Braun, and Gavey 2001; Huang 2018; Barnett et al. 2017).

One research area where the definition of sex tends to be cited is in studies examining young people's sexual debut, often referred to as first intercourse or 'virginity loss', as a significant developmental milestone. However, there is no universal agreement as to what constitutes 'virginity loss', or its social or cultural significance. Averett, Moore, and Price (2014) conducted focus groups with LGBTQ+ university groups and found that less significance was placed on 'virginity loss' for this group of young people than for heterosexual young people, in terms of it being an important 'life event' or milestone. Rather, LGBTQ+ young people viewed virginity as a heterosexual idea and not as important to them as coming out.

Within LGBTQ+ communities, definitions of sex tend to be gendered. Several studies have found that, for over 90% of the gay men, anal sex is considered 'having sex' (Sewell, McGarrity, and Strassberg 2017; Hill et al. 2010; Huang 2018). Sewell, McGarrity, and Strassberg (2017) also found that over 60% of gay and bisexual men included oral sex in their definitions, comparable with findings from Hill et al. (2010). Definitions of sex are broad among women in the LGBTQ+ community with lesbian and bisexual women including oral sex, the use of sex toys and genital touching in their definitions of sex (Horowitz and Spicer 2013; Sewell, McGarrity, and Strassberg 2017; Dion and Boislard 2020).

While LGBTQ+ people's definitions of sex are diverse, this perspective is not always acknowledged in sexual health promotion or education, which often focuses on penile-vaginal intercourse in safe sex promotion (e.g. use of condoms

or prevention of unwanted pregnancy). This may cause non-heterosexual people to feel excluded. For example, studies by Grant and Nash (2018) and Power, McNair, and Carr (2009) found that LGBTQ+ women report disengaging from sexual health information, including advice on cervical screening, because they assumed that it would be irrelevant to women who are not having heterosexual, vaginal, intercourse. Compared to previous generations, an increasing number of young people identify as LGBTQ+, with rates of over 20% in recent research (Jones 2022; Power et al. 2022). Because of this, sexual health messaging must consider sexuality and gender identity to ensure sexual health information is inclusive and relevant to all young people.

Alongside gender and sexuality differences in definitions of sex, there may be differences dependent on religious affiliation and ethnicity, including the ways people define, or value, abstinence. Bersamin et al. (2007), for example, found that people from non-white backgrounds in the USA were more likely than those from white non-Hispanic backgrounds to describe behaviours other than vaginal and anal sexual intercourse, such as genital touching and oral sex, as a loss of abstinence. Similarly, Byers, Henderson, and Hobson (2009) found that religiosity was related to more conservative definitions of abstinence.

Several studies have shown that definitions of sex vary depending on the circumstances in which sex occurs and a person's level of sexual experience. Bersamin et al. (2007) found that young people who had previously experienced genital touching and oral sex were less likely to agree that these practices constituted sex than young people who had not had these experiences. In other studies, both heterosexual (Gute, Eshbaugh, and Wiersma 2008; Sewell and Strassberg 2015) and lesbian, gay and bisexual people (Sewell, McGarrity, and Strassberg 2017) defined sexual practices other than intercourse as 'sex' only when it related to their partner's practices with people outside of their relationship (e.g. oral sex was more likely to be considered sex if it was a form of 'cheating'). Definitions of sex that are not stable across situations, or which display 'definitional discontinuity' (Gute, Eshbaugh, and Wiersma 2008), may also be an attempt to avoid stigma or negative judgement associated with sex. Furthermore, definitions of sex applied to 'hypothetical' scenarios sometimes differ from the definitions applied to personal experiences (Sanders and Machover Reinisch 1999; Hill et al. 2010; Bogart et al. 2000). Although the research on this is limited, it suggests that definitions of sex are not static but are flexible and dependent on perspective and circumstance.

As school-based sexuality education is a key strategy to promote safe sexual practices during adolescence (Fernandes and Junnarkar 2019), and with mandatory sexual consent education currently rolling out in Australian schools, it is timely to focus on definitions of sex in a sample of secondary school-aged adolescents in the Australian context. In this paper, three research questions are considered:

- How are young people's definitions of sex affected by age, gender, sexuality, religiosity, cultural background, and sexual experience?
- Do young people experience definitional discontinuity? Namely, how do young people's personal definitions of sex (sexual practices they have experienced and whether they consider themselves to have had sex) differ from their general, hypothetical, definition of sex?

- In a qualitative exploration of the topic, how do young people conceptualise and define the term 'sex'?

Method

This study used data from the 2021 Australian Survey of Secondary Students and Sexual Health (Power et al. 2022). All the study protocols were approved by the La Trobe University Human Ethics Committee (HEC20401). Recruitment for the study occurred between June and November 2021. Power et al. (2022) provides a full account of the study procedures.

Study sample

Young people aged 14–18 years in Australia were recruited through social media advertising. Minimum quota sampling was used (Panacek and Bagley Thompson 2007) with strata calculated based on total population proportions (Australian Bureau of Statistics 2019) for state/territory of residence, school type, gender and year level (with stratum sizes ranging from 8 to 171). The sample composition of school type, gender and year level in relation to the 2019 census data can be found in the full report (Table S1; Power et al. 2022). Participants consented to participate via an online information statement.

As complete case analyses were necessary for the regression analyses conducted, participants with missing responses or those who selected 'prefer not to answer' were excluded ($n = 798$), leaving 6,043 young people included in the analyses.

Measures

Sociodemographic variables

Participants were asked about their age, their cultural background, including whether they identified as Aboriginal and/or Torres Strait Islander, and if they came from a cultural or linguistically diverse background (CaLD; measured as either speaking a language other than English at home, being born or having parents born in a non-English-speaking country; Ethnic Communities Council of Victoria 2012). Participants were asked about their religiosity ('How important is religious faith in shaping how you live your daily life?'), with 'very' or 'extremely' coded as high religiosity, and 'not religious', 'not at all' and 'somewhat' coded as low religiosity. Participants were asked about their sexual orientation (straight/heterosexual, lesbian/gay, bisexual, questioning/unsure). Gender was assessed by asking participants: 'How do you describe your gender?' with following the response options: 'Man or male', 'woman or female', 'non-binary' or 'I use a different term'. Gender was then coded into three categories: man/male; woman/female; and non-binary or gender diverse. The non-binary or gender diverse category consisted of young people identifying as non-binary and those who used another term to describe their gender such as genderfluid, non-binary female or male, genderqueer, transmasculine or transfeminine. Trans identity or experience was not assessed, and therefore the categories of man/male and woman/female may include trans young people as well as cisgender young people. Young people who identified as non-binary or used another term to define their gender were asked about their sex at birth.

Sex definitions

Young people were asked 'Which of the following would you consider and describe as sex?' and could select multiple responses from a list which consisted of 'mutual masturbation (hand on genitals)', 'genital rubbing (genitals touching genitals)', 'oral sex (mouth on genitals)', 'vaginal sex (penis in vagina)' and 'anal sex (penis in anus)'. Participants could also select 'other' and type in their own answer.

Self-defined sexual experience

Immediately after the question about sex definitions, self-defined sexual experience was measured by asking participants: 'Have you ever had sex?'. To ease confusion between this variable and the variables related to sexual practices such as having ever experienced vaginal, anal and oral sex, the term 'self-defined' will be used when referring to this variable.

Experiences with sexual activities

Next, young people were asked if they had ever experienced any of the following: genital touching, oral sex, anal sex, or vaginal sex. They could respond 'yes' or 'no' to each question.

All questions included a 'prefer not to answer' option which participants could select if they did not wish to respond. These and any 'unsure' options were considered missing for the purpose of this analysis.

Data analysis

The statistical programme R (R Core Team 2022) and interface RStudio (Posit Team 2022) were used for the data analysis. The R-packages *gtsummary* (Sjoberg et al. 2021), *tidyverse* (Wickham et al. 2019) and *flextable* (Gohel and Skintzos 2023) were used to conduct analyses and present descriptive statistics describing young people's definitions of sex and regression analysis tables. Multiple logistic regression analyses with non-missing data were used to examine associations between variables using maximum likelihood estimation. Adjusted odds ratios (OR_{adj}), 95% confidence intervals and *p*-values are presented. Post hoc means comparison tests were conducted using the R-package *multcomp* (Hothorn, Bretz, and Westfall 2008) to perform Tukey's tests where appropriate. Chi-squared analyses were conducted for all variables and can be found in online Supplemental Material 1.

A researcher (SK) trained in the conventional approach to content analysis (Hsieh and Shannon 2005) coded the open-ended definitions of sex with the aim of describing young people's definitions of sex. Quotations were edited for clarity and are presented along with the informant's gender and sexual orientation.

Results

Participant characteristics

Sample demographics are provided in Table 1. Almost two-thirds of the sample identified as women ($n = 3,946/6,043$, 65.3%), 1,683 (27.9%) as men and 414 (6.9%) as non-binary or

Table 1. Frequencies of demographic characteristics and sexual experiences for the sample by gender.

Characteristics and experiences	Young men, <i>n</i> = 1,683 (27.9%)	Young women, <i>n</i> = 3,946 (65.3%)	Non-binary or gender diverse, <i>n</i> = 414 (6.85%)	Total <i>N</i> = 6,043
Age, Mean (SD)	16.2 (1.16)	16.2 (1.15)	15.8 (1.26)	16.2 (1.17)
Sexual orientation, <i>n</i> (%)				
Heterosexual	1,204 (71.5)	2,323 (58.9)	4 (1.0)	3,531 (58.4)
Gay or lesbian	159 (9.4)	115 (2.9)	84 (20.3)	358 (5.9)
Bisexual	227 (13.5)	1,022 (25.9)	164 (39.6)	1,413 (23.4)
Questioning and other term used	93 (5.5)	486 (12.3)	162 (39.1)	741 (12.3)
High religiosity, <i>n</i> (%)	104 (6.2)	191 (4.8)	27 (6.5)	322 (5.3)
CaLD, <i>n</i> (%)	277 (16.5)	604 (15.3)	55 (13.3)	936 (15.5)
Aboriginal and Torres Strait Islander, <i>n</i> (%)	83 (5.0)	215 (5.6)	26 (6.5)	324 (5.5)
Sexual experiences, <i>n</i> (%)				
Vaginal sex, <i>n</i> (%)	693 (41.2)	2,305 (58.4)	157 (37.9)	3,155 (52.2)
Anal sex, <i>n</i> (%)	268 (15.9)	591 (15.0)	49 (11.8)	908 (15.0)
Oral sex, <i>n</i> (%)	859 (51.0)	2,516 (63.8)	187 (45.2)	3,562 (58.9)
Genital touching, <i>n</i> (%)	989 (58.8)	2,694 (68.3)	222 (53.6)	3,905 (64.6)

gender diverse. Sex assigned at birth was recorded for young people who identified as non-binary or used another term to describe their gender; 233 young people were assigned female at birth and identified as non-binary, 107 were assigned female at birth and used a different term to describe their gender, 48 identified as non-binary and were assigned male at birth, and seven young people used a different term to describe their gender and were assigned male at birth.

Over half the sample reported having had sexual experiences (Table 1), with 52.2% (*n* = 3,155/6,043) having experienced vaginal sex, 15.0% (*n* = 908/6,043) anal sex, 58.9% (*n* = 3,562/6,043) oral sex and 64.6% (*n* = 3,905/6,043) having experienced genital touching.

Young people's definitions of sex

Almost all participants (*n* = 5,991/6,043, 99.1%) included vaginal sex in their definition of 'having sex', 83.7% (*n* = 5,060/6,043) included anal sex, 59.7% (*n* = 3,610/6,043) included oral sex, 40.6% (*n* = 2,456/6,043) genital rubbing (genitals on genitals) and 29.5% (*n* = 1,783/6,043) included mutual masturbation in their definition of sex. For 34.9% (*n* = 2,106/6,043) of the sample, vaginal or anal sex were the only practices included in their definition of sex. A further 21.2% (*n* = 1,279/6,043) included oral sex in their definition, defining sex as vaginal, anal, and oral sex without including mutual masturbation or genital rubbing, and 24.7% (*n* = 1,487/6,043) included all sexual practices (vaginal, anal, oral, mutual masturbation and genital rubbing) in their definition of sex (see online Supplemental Table 2 for complete list of sexual practices defined as sex). Table 2 lists each sexual activity and young people's definitions of sex by gender and sexual orientation.

Associations between demographic characteristics, sexual experiences and definitions of sex

Multiple logistic regression analyses (Table 3) were conducted to explore associations between demographic characteristics and sexual experiences with definitions of sex.

Table 2. Frequencies of sexual practices defined as sex by gender and sexual orientation.

Gender and sexual orientation	Vaginal sex, n (%)	Anal sex, n (%)	Oral sex, n (%)	Genital rubbing, n (%)	Mutual masturbation, n (%)
Young women					
Heterosexual (n = 2,323)	2,311 (99.5)	1,728 (74.4)	1,152 (49.6)	667 (28.7)	489 (21.1)
Gay or lesbian (n = 115)	111 (96.5)	106 (92.2)	104 (90.4)	96 (83.5)	73 (63.5)
Bisexual (n = 1,022)	1,013 (99.1)	923 (90.3)	652 (63.8)	506 (49.5)	349 (34.1)
Questioning and other term used (n = 486)	482 (99.2)	441 (90.7)	312 (64.2)	229 (47.1)	161 (33.1)
Young men					
Heterosexual (n = 1,204)	1,195 (99.3)	1,002 (83.2)	686 (57.0)	407 (33.8)	304 (25.2)
Gay or lesbian (n = 159)	153 (96.2)	159 (100.0)	127 (79.9)	79 (49.7)	61 (38.4)
Bisexual (n = 227)	226 (99.6)	213 (93.8)	154 (67.8)	107 (47.1)	76 (33.5)
Questioning and other term used (n = 93)	92 (98.9)	90 (96.8)	75 (80.6)	57 (61.3)	40 (43.0)
Non-binary or gender diverse					
Heterosexual (n = 4)	4 (100.0)	3 (75.0)	3 (75.0)	1 (25.0)	1 (25.0)
Gay or lesbian (n = 84)	83 (98.8)	83 (98.8)	72 (85.7)	66 (78.6)	51 (60.7)
Bisexual (n = 164)	162 (98.8)	154 (93.9)	139 (84.8)	113 (68.9)	85 (51.8)
Questioning and other term used (n = 162)	159 (98.1)	158 (97.5)	134 (82.7)	128 (79.0)	93 (57.4)

Vaginal sex

There were no differences in vaginal sex being defined as sex for gender, age, CaLD status, religiosity or sexual experiences. Gay or lesbian young people were less likely to include vaginal sex in their definition of sex than heterosexual young people. A post hoc Tukey test found no other differences in gender or sexual orientation.

Anal sex

Young women were less likely to include anal sex in their definitions of sex than young men. LGBQ+ young people were more likely to include anal sex in their definition of sex compared to heterosexual young people. A post hoc Tukey test found that non-binary or gender diverse young people were more likely than young women to include anal sex in their definition of sex ($p = .016$). Young people who had experienced vaginal sex were less likely to include anal sex in their definition, whereas young people who had experienced anal sex were more likely to include it in their definition of sex.

Oral sex

Young women were less likely to include oral sex in their definition of sex compared to young men. Non-binary or gender diverse young people were more likely to include oral sex in their definition of sex than young men. LGBQ+ young people were more likely to include oral sex in their definition than heterosexual young people. A post hoc Tukey test found that non-binary or gender diverse young people were more likely to include oral sex in their definition compared to young women ($p < .001$) and that bisexual and questioning young people were less likely to include oral sex in their definition than gay or lesbian young people ($p < .001$). Young people who had experienced vaginal or anal sex were more likely to include oral sex in their definition of sex, whereas those with

Table 3. Multiple logistic regression analyses examining associations between sexual practices defined as 'sex', demographic characteristics and sexual experiences.

Characteristic	Vaginal sex		Anal sex		Oral sex		Genital rubbing		Mutual masturbation	
	OR _{adj} (95% CI) ¹	p	OR _{adj} (95% CI) ¹	p	OR _{adj} (95% CI) ¹	p	OR _{adj} (95% CI) ¹	p	OR _{adj} (95% CI) ¹	p
Gender										
Young men	Ref.		Ref.		Ref.		Ref.		Ref.	
Young women	1.05 (0.54, 1.98)	.89	.61 (0.51, 0.72)	<.001	.79 (0.70, 0.89)	<.001	.97 (0.85, 1.10)	.60	.91 (0.80, 1.04)	.18
Non-binary or gender diverse	1.05 (0.40, 3.11)	.92	1.38 (0.82, 2.48)	.25	1.97 (1.47, 2.68)	<.001	2.57 (1.99, 3.35)	<.001	2.00 (1.57, 2.55)	<.001
Sexual orientation										
Heterosexual	Ref.		Ref.		Ref.		Ref.		Ref.	
Gay or lesbian	.24 (0.11, 0.58)	<.001	6.52 (3.61, 13.3)	<.001	4.10 (3.03, 5.63)	<.001	3.71 (2.90, 4.78)	<.001	3.05 (2.40, 3.87)	<.001
Bisexual	.70 (0.34, 1.50)	.34	3.02 (2.46, 3.74)	<.001	1.81 (1.59, 2.08)	<.001	2.27 (1.99, 2.60)	<.001	1.84 (1.59, 2.11)	<.001
Questioning +	.60 (0.26, 1.50)	.24	3.47 (2.58, 4.75)	<.001	1.86 (1.55, 2.23)	<.001	2.28 (1.92, 2.71)	<.001	1.90 (1.59, 2.27)	<.001
Age	1.14 (0.89, 1.45)	.31	1.06 (1.00, 1.14)	.066	1.04 (0.99, 1.09)	.15	1.05 (1.00, 1.10)	.056	1.06 (1.00, 1.11)	.039
CaLD	1.12 (0.55, 2.60)	.77	.96 (0.79, 1.17)	.65	1.08 (0.93, 1.25)	.32	1.06 (0.91, 1.22)	.48	1.14 (0.98, 1.34)	.088
High religiosity	.54 (0.23, 1.58)	.20	.79 (0.59, 1.09)	.14	1.25 (0.98, 1.61)	.077	1.29 (1.01, 1.64)	.039	1.34 (1.04, 1.71)	.021
Ever had vaginal sex	2.02 (0.82, 4.86)	.12	.77 (0.60, 1.00)	.050	1.37 (1.14, 1.65)	.001	1.10 (0.91, 1.33)	.33	1.14 (0.93, 1.40)	.20
Ever had anal sex	.70 (0.29, 1.81)	.44	2.14 (1.70, 2.73)	<.001	1.27 (1.08, 1.49)	.003	1.05 (0.89, 1.24)	.53	1.07 (0.90, 1.27)	.44
Ever had oral sex	1.99 (0.73, 5.32)	.17	.77 (0.56, 1.05)	.10	.71 (0.56, 0.89)	.003	.74 (0.59, 0.93)	.010	1.04 (0.81, 1.34)	.75
Ever experienced genital touching	.51 (0.23, 1.23)	.11	.81 (0.60, 1.11)	.18	.59 (0.47, 0.73)	<.001	.62 (0.50, 0.77)	<.001	.61 (0.48, 0.76)	<.001

¹OR_{adj} = adjusted odds ratio, CI = confidence interval.

Bold emphasis denotes significance at the .05 level.

experiences of oral sex and genital touching were less likely to include oral sex in their definition.

Genital rubbing

Non-binary or gender diverse young people were more likely to include genital rubbing in their definition of sex compared to young men, as were LGBTQ+ young people compared to heterosexual young people. A post hoc Tukey test found that non-binary or gender diverse young people were more likely than young women to include genital rubbing in their definition ($p < .001$), and compared to gay or lesbian young people, bisexual ($p = .002$) and questioning ($p = .005$) young people were less likely to include genital rubbing in their definition of sex. High religiosity was also found to be associated with higher odds of including genital rubbing in the definition of sex. Young people who had experienced oral sex or genital touching were less likely to include genital rubbing in their definition of sex than those who did not have these experiences.

Mutual masturbation

Non-binary or gender diverse young people were more likely to include mutual masturbation in their definition of sex compared to young men, as were LGBTQ+ young people compared to heterosexual young people. A post hoc Tukey test found that non-binary or gender diverse young people were more likely than young women ($p < .001$) to include mutual masturbation in their definition of sex and that compared to gay and lesbian young people, bisexual ($p < .001$) and questioning ($p = .004$) young people were less likely to include mutual masturbation in their definition of sex. Age and religiosity were associated with including mutual masturbation in the definition of sex. Young people who had experienced genital touching were less likely to include mutual masturbation in their definition of sex.

Gender differences

A secondary analysis was conducted examining differences between young people who identified as man/male, woman/female, non-binary or gender diverse and were assigned female at birth, and non-binary or gender diverse and were assigned male at birth. Non-binary or gender diverse young people who were assigned female at birth ($n = 340$) were significantly more likely to define anal sex, oral sex, genital rubbing and mutual masturbation as sex compared to young people who identified as men or women ($p < .001$ for all comparisons). There was no difference between genders for vaginal sex. Non-binary or gender diverse young people who were assigned male at birth ($n = 54$) were more likely to include genital rubbing in their definition of sex compared to young men ($p = .028$).

Definitional discontinuity

As can be seen from [Table 4](#), most participants who answered, 'yes' to the question 'have you ever had sex?' (i.e. self-defined sexual activity) reported experiencing vaginal, anal or oral sex ($n = 3,288/3,329$, 89.8%); 98.3% ($n = 3,086/3,138$) of those who experienced vaginal sex, 96.8% ($n = 878/907$) who had experienced anal sex, and 89.8% ($n = 3,180/3,540$) who had experienced oral sex self-defined as having had sex.

Personal definitions of sex were largely consistent with ‘hypothetical’ definitions, particularly for vaginal and anal sex. Of the 2,321 young people who had experienced vaginal sex but not anal sex, 98.4% ($n = 2,284/2,321$) included vaginal sex in their definition and answered ‘yes’ to the question ‘have you ever had sex’. Of the 96 young people who had experienced anal sex but not vaginal sex, 89.6% ($n = 86/96$) answered ‘yes’ and included anal sex in their definition.

However, out of the 203 young people who had experienced oral sex but not vaginal or anal sex, 46.8% ($n = 95/203$) answered ‘no’ to the question ‘have you ever had sex?’ but had included oral sex in their definition of sex, suggesting that although included in their hypothetical definition, oral sex did not personally count as ‘having sex’ for these 95 participants (Table 4).

Table 4. Frequency of self-defined sexual experience for participants who had experienced each sexual practice and included the sexual practice in their definition of sex.

Experiences and definitions	N	Self-defined sexual experience	
		No, n (%)	Yes, n (%)
Experienced vaginal sex (only) and vaginal sex included in definition	2,321	37 (1.6%)	2,284 (98.4%)
Experienced anal sex (only) and anal sex included in definition	96	10 (10.4%)	86 (89.6%)
Experienced oral sex (only) and oral sex included in definition	203	95 (46.8%)	108 (53.2%)

Note: Self-defined sexual experience refers to those who answered, ‘yes’ to the question ‘have you ever had sex’.

Qualitative exploration of how young people conceptualised and defined the term ‘sex’

There were 63 young people who described other definitions of sex using open text responses. Five themes were identified and are outlined below with example quotations.

Sex includes sexual acts between two women

Most commonly young people spoke about sex between two women with comments such as ‘lesbian sex’ (multiple participants) and ‘sex not including [a] penis’ (bisexual man).

Sex depends on sexuality

Others described sex as being different dependent on sexuality such as ‘penetration for hetero/gay couples and scissoring for lesbians’ (woman, unsure of sexuality) and ‘I would only classify mouth on genital and genital rubbing to be sex for non-straight couples’ (bisexual woman).

Sex includes the use of sex toys

Involving sex toys was also a common descriptor of sex, both ‘sex toys’ and ‘strap-ons’, were mentioned several times, with other equipment such as vibrators and dildos mentioned as well.

Sex can be defined in many ways

Responses indicated that sex could be interpreted differently for each individual; 'I think it depends on the person' (bisexual woman), 'sex has many different meanings to lots of people' (gay/lesbian non-binary) and 'whatever you choose it to be. There is no real answer' (bisexual woman). Others described sex as having a broad definition that can include 'anything and everything' (heterosexual man) or more specifically 'any sexual act involving genitals' (heterosexual woman), 'anything that includes having a sexual session' (woman, unspecified sexuality) and '[involving] sexual fluids' (heterosexual man).

Sex is about pleasure

Several participants wrote that sex entails sexual acts with the purpose of pleasure or orgasm: 'I would define [sex] as consensual orgasm caused by a person that isn't you' (woman, unsure of sexuality), 'orgasm at another's manipulation' (man, unspecified sexuality), 'anything that is sexual or brings one or both of us pleasure' (non-binary, unspecified sexuality) and 'any activities with one (or more) partners in which all involved reach orgasm' (gay man).

Discussion

With the inclusion of consent education in the Australian secondary school curriculum, it is timely to examine the various ways that school-aged young people define sex. Understanding the complexity and breadth of young people's definitions is a step towards ensuring discussions about sex, consent and sexual health are inclusive and clearly understood by educators, health professionals and young people alike. Consistent with previous research (Bersamin et al. 2007; Bogart et al. 2000; Barnett et al. 2017; Sanders and Machover Reinisch 1999; Sewell, McGarrity, and Strassberg 2017; Peck et al. 2016; Sewell and Strassberg 2015), we found that inclusion of vaginal and anal sex in the definition of sex is common. We also found that for almost all the young people in our sample, including LGBTQ+ young people, vaginal sex and, to a lesser extent, anal sex, was part of their definition of sex. There was less consensus about other sexual practices that young people included in their definition of sex. As found in other studies (Barnett et al. 2017; Horowitz and Spicer 2013; Sewell and Strassberg 2015), some, but not all, young people included oral sex, genital rubbing and mutual masturbation in their definition of sex. These definitions were contextual, based on young people's gender, sexual orientation as well as their previous sexual experiences.

Our study findings support previous research which shows LGBTQ+ young people define sex in broad terms (Averett, Moore, and Price 2014; Dion and Boislard 2022; Stolze 2022). Non-heterosexual young people in our sample were more likely than heterosexual young people to include anal sex, oral sex, genital rubbing, and mutual masturbation in their definitions of sex. Likewise, non-binary and gender diverse young people were more likely than those identifying as men and women to include oral sex, genital rubbing and mutual masturbation in their definition of sex, particularly those who were assigned female at birth. While there have been studies exploring the meaning of sex for gay and straight men (Huang 2018), lesbian, gay and bisexual women (Sewell, McGarrity, and Strassberg 2017) and men who have sex with men (Martos 2016), little is known about differences between different sexual orientations. Our study found that, as well as lesbian, gay, bisexual and questioning young people including more sexual practices in their definitions of sex compared to heterosexual young people,

bisexual and questioning young people were more likely than gay and lesbian young people to include oral sex, genital rubbing and mutual masturbation in their definition of sex.

We found that young people who were highly religious were more likely to include genital rubbing and mutual masturbation in their definitions of sex, concurring with Byers, Henderson, and Hobson (2009), who found that religious people held more conservative definitions of sex than non-religious people. Contrary to Bersamin et al. (2007), no differences were found between CaLD and non-CaLD young people, possibly due to the broad definition of CaLD used in the present study.

Despite the word 'sex' being included in the terms 'oral sex', 'vaginal sex' and 'anal sex' in our survey instrument, which may have predisposed participants to endorse these items, not all participants included these sexual acts in their definitions. Perhaps using different descriptions of sexual acts (e.g. mouth on genitals, penis in vagina, penis in anus) would have resulted in different findings, however since 'oral sex', 'vaginal sex' and 'anal sex' are common terms, they were appropriate to use in this context. For instance, heterosexual young women in this sample were conservative in their definitions of sex, contrary to other research which indicates that young women tend to have broader concepts of sex (Barnett et al. 2017; Stolze 2022). In our study, fewer heterosexual young women included anal sex, oral sex, genital rubbing or mutual masturbation in their definitions of sex than people of other genders or sexual orientations, suggesting vaginal sex is possibly a more important concept for heterosexual young women than women with other sexual orientations, men, and non-binary or gender diverse young people.

Young people's sexual experiences influenced how they defined sex, a finding that is consistent with those in previous research (Bersamin et al. 2007). We found that young people who had experienced vaginal or anal sex were more likely to include oral sex in their definition of sex than young people who had not. Furthermore, young people who had experienced oral sex or genital touching, regardless of whether they had experienced vaginal or anal sex, were less likely to consider oral sex, genital rubbing or mutual masturbation as sex. These findings occurred despite adjusting for sexuality and gender. It is possible that young people who had experienced oral sex or genital touching, but not penetrative sexual intercourse, were more invested in whether they considered themselves to have had sex, or perhaps oral sex and genital touching were used in lieu of penetrative sex in order to remain abstinent from penetration. In other words, perhaps some young people were committed – emotionally, socially or spiritually – to the idea of maintaining their virginity and/or choosing to abstain from sex.

Our findings demonstrate that definitions of sex are contextual. For instance, while the majority of young people's definitions of sex matched their own sexual experiences (i.e. young people who defined sex as vaginal, anal or oral sex and had experienced these behaviours also self-defined as having had sex), there was support for the notion of definitional discontinuity proposed by Gute, Eshbaugh, and Wiersma (2008). Interestingly, 46.8% of the young people who included oral sex in their definitions, and had experienced oral sex, did not consider themselves to have had sex. It appears that for some, their 'hypothetical' definition did not apply to them personally.

Open-ended text responses concurred with previous research suggesting that sex can have different meanings and interpretations for individuals and is not simply defined in terms of sexual acts (Carpenter 2001; Bogart et al. 2000; Faulkner 2003; Robinson, Balkwell, and McNeal Ward 1980; Gupta 2022). The five main themes we identified indicated young people's

definitions of sex tended to be contextual and dependent on the sexuality of people involved. Many young people also prioritised sexual pleasure and were open to a broad definition of sex where the objective was pleasure. However, masturbation (or solo sex) was clearly not part of this definition, with many people indicating that 'sex' involves pleasure given by another person. These findings are in line with Gupta's (2022) conclusion that sex can be defined in terms of the objectives one wishes to achieve and lists reproduction, pleasure and orgasm as possible goals of sex. The qualitative component of this study was very limited. Only 63 participants responded to this question and the answers were generally one sentence long or less. We found that some of these responses were ambiguous or circular in nature (e.g. 'sex between two women') which may indicate that young people acknowledged that two women could have sex together and wanted to be inclusive but did not know what sex between two women would entail. In addition to this theme of sex between two women, participants talked more generally about sexuality and how differences in the definition of sex are necessary depending on sexuality and gender.

Limitations and strengths

Since a non-probability sampling method was used, this study is limited by a lack of representativeness to the general population. However, due to the large sample size and the diversity of the sample, the results are likely to be largely indicative of what young people in Australia define as sex. This large sample size has enabled us to expand our findings beyond heterosexual and non-heterosexual comparisons.

In this study, young people could self-identify their gender as woman, man, non-binary or gender diverse or indicate they use 'other' terms for their gender. Young people with trans experience could identify as male or female if this gender category was best aligned to their identity. This means the categories of man/male and woman/female may include young people who are trans or have trans experience. Some participants instead volunteered information about trans identity or experience, however, we did not have a large enough sample to include transmasculine and transfeminine as separate gender categories for this analysis. We recognise the limitations with this definition and that non-binary and gender diverse young people are a heterogeneous group with different gendered experiences. Careful consideration of the measurement of gender and sexuality is necessary in all fields involving human subjects to avoid this limitation. Our secondary analysis investigating sex assigned at birth indicates that non-binary and gender diverse people who were assigned female at birth were more likely than young people who identified as men/male and women/female to define anal sex, oral sex, genital rubbing and mutual masturbation as sex. There were no differences in definitions between young people who identified as non-binary or gender diverse and were assigned male at birth and other genders. It is important to note that there were only 54 participants who identified as non-binary or gender diverse and were assigned male at birth, so further research is warranted.

The current study did not examine the concept of virginity, which may be thought of as a limitation. However, the exclusion of the terms 'virginity' and 'virginity loss' from the study was purposeful given the ambiguity of the term and its ties to heteronormative, vaginal-penile sexual intercourse (Averett, Moore, and Price 2014).

Recommendations for research and practice

As shown in these findings, assumptions about what constitutes sex or whether someone is 'having sex' or is 'sexually experienced' can vary substantially. This has important implications for sex education and sexual health promotion as young people may not relate to messages or topics if they do not see their own experiences reflected or if they assume that their sexual experiences are not relevant or not likely to be included. For example, LGBTQ+ young people may assume that definitions of sex used in education, or promotion, of safe sex or contraception use are based on normative definitions of sex as penis/vagina intercourse. If it is not explicitly stated that 'safe sex' relates to a wide range of practices, including anal sex or close genital contact, then young people may not see information relating to safe sex as relevant to them or feel alienated from the content. Beyond this, a more explicit and precise articulation of what sex may involve, and what meanings young people attach to different practices, may help to build their capacity to talk about their sexual practices. A wider vocabulary and greater confidence to talk about sex will support young people to articulate their needs and wants with sexual partners and navigate consent.

Encouraging young people to reflect on what they consider to be 'real sex' may also help to build critical insight into the assumptions, or expectations, they hold regarding sex and relationships. For example, young people may attach particular meanings to the idea of 'real' sex or 'virginity loss' that influence the decisions they make about who they have sex with, the timing of sex, or whether they use a condom for vaginal or anal intercourse (Ashcraft 2012). Insight into the influence of cultural attitudes and sexual morality on personal decisions about sex can help young people build critical sexual literacy and greater capacity to make informed decisions about their sex lives and relationships.

The qualitative component of the current study provides valuable information about how young people define and think about sex and warrants further exploration. Young people sometimes used circular definitions such as 'sexual acts' as a definition of sex which could be explored further in qualitative interviews. Further qualitative research is warranted to explore the nuances of young people's sexual discourse. Additionally, qualitative analysis may provide further understanding of the concept of 'definitional discontinuity' (Gute, Eshbaugh, and Wiersma 2008) and help us make sense of why some participants who included oral sex in their definition of sex, and who reported oral sex, still considered themselves as not having had sex.

Conclusion

This study suggests that young people's definitions of sex are diverse and not limited to penetrative sex. Young people's definition of sex also varies according to gender, sexuality, and religiosity, as well as their prior sexual experience. With evolutions in sex and sexuality education in Australia, including mandatory consent education, and an increasing number of young people identifying as LGBTQ+, there is a need for educators to adopt broad and clearly articulated explanations of sexual practices when discussing sexual health with young people to ensure clarity and relevance for all young people.

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