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Father-son sex communication in Australian adolescent males

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ABSTRACT

Little is known about the effect of father-son communication on sexual health knowledge and potential sexual health outcomes in young men. We investigated the confidence and trust that adolescent Australian males have in their fathers and whether this contributes to the use of their father as a source of sexual health information. Data analysis explored differences in confidence, trust, and use of fathers as a source of sexual health information among male, female, and trans- and gender-diverse participants. Male participants were more confident seeking sexual health advice from their fathers, had higher trust that the information was accurate, and were more likely to use their fathers as a source of sexual health information than females and trans- and gender-diverse participants. There is evidence to indicate that father-son sex communication can play a role in increasing adolescent males' knowledge of sexual health.

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KEYWORDS

Father-son sex communication; adolescent males; Australia; sexual knowledge; sexual health; gender

Background

Adolescence is a time of life when young males are more likely to engage in risk taking behaviours, than females of the same age (Courtenay, 2007; Habib et al., 2023; Osborn, 2015). These behaviours are defined as but not limited to, activities leading to self-harm, smoking, excessive use of alcohol, illicit drugs, and condomless sex (Australian Institute of Health and Welfare, 2023; Sanci et al., 2018). There is also significant published literature referring to adolescent males as invisible and hard to reach in the health space (Bunting & McAuley, 2004; Osborn, 2015; Paranjothy et al., 2009; Sanci et al., 2018). However, it is also evident that in Australia there is a lack of targeted health programmes, including health screening and health assessment, aimed specifically at adolescent males (Macdonald et al., 2022). Research indicates that Australian adolescent males are hesitant to seek health advice or information, due to a range of barriers. These barriers are wide and varied and include individual barriers such as stoicism and self-reliance, health system barriers such as a lack of male specific services, structural barriers such as cost and a range of cultural barriers (Macdonald et al., 2022)

Given that young men face these barriers to accessing healthcare, it is logical that they also face barriers seeking sexual health information (Byron, 2018, Fisher et al., 2023; Fisher et al., 2019). When they seek sexual health information, adolescent males are most likely to do so from their peers, followed by the internet rather than a health professional (Fisher &

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Kauer, 2019; Litras et al., 2015; Fisher et al., 2023). Compared to Australian adolescent females, Australian adolescent males seek less sexual health information and have lower overall rates of sexual health knowledge (Fisher & Kauer, 2019; Fisher et al., 2022; Ritter et al., 2015).

In Australia, between 2009 and 2020, notification rates for STIs continued to rise, particularly in the 15–24 year old age group. Data from the Australian Institute of Health and Welfare (AIHW) reveal a 17% increase for chlamydia, 78% for gonorrhoea and 95% for infectious syphilis during this time period (Australian Institute of Health and Welfare, 2023). Over the last decade, this increase in STIs has been of particular concern, considering the identified lack of sexual health knowledge in young Australian men. Additionally, the rate of unintended pregnancy in Australian women has seen a modest decline, falling from 42 to 37 unintended pregnancies per 1,000 women between 1991 to 2019 (Loxton et al., 2018; Shankar et al., 2023). However, among Australian women aged 19–24, lifetime prevalence of unintended pregnancy is 12.6%, and among the subgroup who have ever been pregnant, 81% (Shankar et al., 2023). The increasing prevalence of STIs and continued burden of unintended adolescent pregnancies indicate a need to advance sex education in Australia (Connor et al., 2018).

A body of literature has established an association between sex communication by parents with their children and the positive sexual attitudes and health behaviours of adolescents (Dilorio et al., 2003; Dyson & Smith, 2011; Flores & Barroso, 2017; Padilla-Walker et al., 2020; Widman et al., 2015). The current discourse, however, indicates that most parental sexual communication, which includes meaningful discussions about sex, safe sex, relationships and peer pressure, between children and their parents is undertaken by mothers (Dyson & Smith 2011; Kirkman et al., 2001). Several U.S. based studies provide evidence to support positive sexual attitudes and sexual health behaviours in adolescents who have discussed sex with their mothers (Aspy et al., 2007; Guilamo-Ramos et al., 2011; Halpern-Felsher et al., 2004; O’Sullivan et al., 2005). Evidence indicates that not only do mothers communicate about sex more often with their sons and daughters, but mothers are also found to be more confident in their ability to provide accurate and appropriate information than fathers (Flores & Barroso, 2017; Widman et al., 2015; Wright, 2009). Research focusing on parent-child sex communication in the Australian context is limited; however, what there is, aligns with U.S. research indicating that mothers assume the role of sex education providers for their children (Downie & Coates, 1999, Dyson & Smith, 2011; Kirkman et al., 2001, 2002). Dyson & Smith (2011) more recently discussed that while Australian mothers undertake sex education for both their sons and their daughters, they are less comfortable discussing sex with their sons. These women also reported that the men in their lives are often uncomfortable, unwilling, or too busy to undertake these discussions with their children (Dyson & Smith, 2012). Kirkman et al. (2001) identified that father son sex communication in the Australian context, is often impersonal, superficial with underlying heterosexist humour. This combination of feminine influence from mothers and traditional masculinity messaging from fathers, may contribute to suboptimal knowledge transfer and continuation of gendered sex messaging.

In the 6th National Survey of Australian Secondary Students and Sexual Health (Fisher et al., 2019), the data indicated that the male participants had used their father as a source of sexual health information, more often than either the female or trans and gender diverse participants. The males were also less likely to have used their mother as a source of sexual health information, more than either the female or trans and gender diverse participants. However, there is very limited research on the role of fathers in the provision of sexual health information to their sons, including research into father-son sex communication (Downie & Coates, 1999, Dyson & Smith, 2012; Kirkman et al., 2001, 2002). Using data from the Australian National Sex Survey (Fisher et al., 2019). The specific aims of this study were to explore the following:

- (1) Australian adolescent males’ confidence in talking to their fathers about sexual health topics.

- (2) Australian adolescent males' trust in their fathers as a source to provide accurate sexual health information.
- (3) Australian adolescent males' use of their fathers as sources of sexual health information.

Methods

Study design

We used data from the 6th National Survey of Australian Secondary Students and Sexual Health, 2018, an anonymous online survey that used a mix methods approach covering the domains of socio-demographic information, STI knowledge, sexual behaviours, and sexual health education (Fisher et al., 2019). Full details can be found in the published protocol (Fisher et al., 2019).

Recruitment

The target group for the anonymous online survey was young people living in Australia. Recruitment was undertaken using advertising on the Facebook platform (Fisher et al., 2019). Recruitment was conducted using a targeted two-phase approach with minimum quota sampling, resulting in diverse cross-sectional representation of this cohort (Fisher et al., 2019).

Measures

Sociodemographic variables used were gender (male, female, or trans and gender diverse), age (14–18 years), rurality (major metropolitan area/other), Culturally and Linguistically Diverse (CALD) status (Were you born in Australia, If no -which country where you born in?, What year did you arrive in Australia to live here for one or more year?, Are you of Aboriginal or Torres Strait Islander origin?, In which country was your mother born?, In which country was your father born?, Is English the main language spoken at home?), Religion or Faith (not religious/all else) and sexual orientation (gay, bisexual or questioning).

All items in the survey had a force-word format (i.e. participants were required to answer an item to continue) and a 'Prefer not to Answer' option to ensure that participants could opt out of any questions if they felt uncomfortable. 'Prefer not Answer' responses were excluded before analyses (Fisher et al., 2019).

Confidence in talking to their fathers about sexual health topics, was measured by three items, (i) 'How confident are you that you could talk about HIV and other sexually transmissible infections with ...' (ii) 'How confident are you that you could talk about decisions concerning contraception with ...' (iii) 'How confident are you that you could talk about sex with ...'. The participations were asked to indicate the level of confidence they had, Low = Not at all confident, Moderate = Somewhat confident and High = Confident or very confident or each item, talking about these three topics with each of the following groups, Doctor/GP, School counsellor, School nurse, Teacher, Youth worker, Mother/Female guardian/Step-parent, Father/Male guardian/Step-parent, Female friend, Male friend or Older brother/sister.

Trust in the accuracy of sexual health information provided by their fathers, was measured by asking the Participants 'For each of the following, please indicate how much you trust them to provide you with accurate sexual health information', None = Do not trust, Moderate = Trust a little or somewhat and High = Trust or trust a lot. The sources of information were, Doctor/GP, School counsellor, School nurse, Teacher, Youth worker, Mother/Female guardian/Step-parent, Father/Male guardian/Step-parent, Female friend, Male friend or Older brother/sister.

Use of their fathers as a source of sexual health information was measured by asking Participants to 'select all of the sources of information that they have ever used for advice about sexual health'. The

options were used/not used, and the sources of information were Doctor/GP, School counsellor, School nurse, Teacher, Youth worker, Mother/Female guardian/Step-parent, Father/Male guardian/Step-parent, Female friend, Male friend or Older brother/sister, Internet websites, School programmes and Community health services.

Ethical considerations

Ethics approval was granted by the (Institution) Human Ethics Committee and the study complied with the ethical standards required by the National Health and Medical Research Council (The National Health and Medical Research Council, 2018).

Adolescents who are sexually active and/or part of a sexuality or gender minority may be at an increased risk of harm if they are required to provide parental consent. Therefore, the ethics committee waived the requirement for parental consent for this study. However, the Participant Information sheet was available online, and participants under 18 years of age were advised to discuss participating in the survey with their parents or guardians (Fisher et al., 2019).

Data analysis

Data analysis was performed using R version 4.1.3 (R Core Team, 2021). Demographic characteristics were analysed using descriptive statistics.

Confidence in talking to their fathers about sexual health topics, was analysed by conducting ANOVA tests to compare gender differences in the level of confidence young people had in discussing STIs, contraception, and sex with their fathers. Tukey's multiple pairwise comparison was performed for male and female, male and trans and gender diverse, and female and trans and gender diverse groupings.

Trust in the accuracy of sexual health information provided by their fathers, was analysed by conducting ANOVA tests to compare gender differences in the level of trust young people had in the accuracy of sexual health information received from their fathers. Tukey's multiple pairwise comparison was performed for male and female, male and trans and gender diverse, and female and trans and gender diverse groupings.

Use of their fathers as a source of sexual health information, was analysed by undertaking Chi Square analyses to explore gender differences in the use of fathers as source of sexual health information.

Next, focusing only on males, we combined the separate questions of confidence in talking to their father about sexual health topics and trust in the accuracy of sexual health information provided by their father to see how they would interact for the use of their father as a source of sexual health information. Three logistic regression models were used to estimate Odds Ratios (OR) and their 95% Confidence Intervals (CI), exploring associations between the dependent variable's confidence, trust, and use of fathers, as a source of sexual health information, and the independent variables age, regional/remote status, Culturally and Linguistically Diverse (CALD) status, religion, and sexual orientation.

Multiple regression analyses were undertaken to estimate adjusted ORs and their 95% CIs as well as the standardized coefficient beta, for associations between the dependent variables confidence and trust, and the independent variables: 1) use of father (logistic regression), (2) STI knowledge (linear regression), (3) Ever had sex (linear regression), (4) Condom use at last sex (logistic regression), (5) pressure from parents to remain a virgin (linear regression), and (6) sexting behaviours (linear regression). Age and sexual orientation were used as the adjustment factors. Linear regression was used on the items from the survey that were continuous or scaled (2, 3, 5, and 6), and logistic regression was used on the items that were binary (1 and 4).

Table 1. Participant demographics by gender.

Characteristic	Female <i>N</i> = 4,377 (53%) ¹	Male <i>N</i> = 3,685 (45%) ¹	Trans and gender diverse <i>N</i> = 201 (2.4%) ¹
Age			
14	264 (6.0%)	215 (5.8%)	11 (5.5%)
15	904 (20.7%)	614 (16.7%)	38 (18.9%)
16	1,513 (34.6%)	1,080 (29.3%)	65 (32.3%)
17	1,249 (28.5%)	1,158 (31.4%)	59 (29.4%)
18	447 (10.2%)	618 (16.8%)	28 (13.9%)
School Year			
Year 9	316 (7.3%)	274 (7.5%)	15 (7.7%)
Year 10	930 (21.5%)	667 (18.3%)	35 (17.9%)
Year 11	1,344 (31.1%)	985 (27.1%)	58 (29.7%)
Year 12	1,195 (27.7%)	1,059 (29.1%)	54 (27.7%)
Not at school	534 (12.4%)	652 (17.9%)	33 (16.9%)
ABS remoteness codes²			
Major city	2,998 (74.7%)	2,637 (77.6%)	152 (81.3%)
Inner regional	726 (18.1%)	565 (16.6%)	28 (15.0%)
Outer regional	257 (6.4%)	178 (5.2%)	6 (3.2%)
Remote	33 (0.8%)	19 (0.6%)	1 (0.5%)
Religion			
No religion	2,633 (62.1%)	2,258 (63.4%)	145 (75.1%)
Catholic	841 (19.8%)	603 (16.9%)	11 (5.7%)
Other Christian	646 (15.2%)	544 (15.3%)	17 (8.8%)
Other	122 (2.9%)	155 (4.4%)	20 (10.4%)
Sexual orientation			
Heterosexual or straight	3,100 (72.1%)	2,843 (78.6%)	16 (8.2%)
Gay or Lesbian	80 (1.9%)	294 (8.1%)	43 (22.1%)
Bisexual	836 (19.4%)	360 (10.0%)	121 (62.1%)
Questioning	286 (6.6%)	120 (3.3%)	15 (7.7%)

¹*n* (%).

Australian Bureau of Statistics (2020)

Results

Participants

The 6th National Survey of Secondary Student and Adolescent Sexual Health was completed by 8,263 young people aged 14–18 years living in Australia. The sociodemographic characteristics of the participants stratified by gender, are shown in Table 1. The participants were relatively evenly split by traditional gender markers, with slightly more females (*n* = 4,377; 53.0%). Younger participants (age 14–15) had lower levels of representation (*n* = 2,046; 24.7%), and most participants were in years 11 and 12 (*n* = 4,695; 56.8%). Government schools formed the largest educational system represented in the survey (*n* = 3,645; 52.4%). The two most populous states, New South Wales and Victoria also represented the majority of participants (*n* = 4,558; 55.2%). The majority of the overall sample identified as heterosexual (*n* = 5,959; 73.0%) However, a substantial minority identified as Gay or Lesbian (*n* = 417; 5.1%), Bisexual (*n* = 1317; 16.1%) or Questioning (*n* = 421; 5.2%), which is comparable with the Australian Bureau of Statistics (2020) estimates of 6.1% of Australians aged 15–24, identifying as gay, lesbian, or 'other'.

Confidence in talking to fathers about sexual health topics

A one way analysis of variance (ANOVA) was undertaken on the level of confidence the participants had in seeking sexual health information from their fathers, on three sexual health topics, (i) discussing STIs with their fathers, (ii) discussing contraception with their fathers, and (iii) discussing sex with their fathers. The ANOVA yielded a significant difference between the male, female and trans and gender diverse participants (Table 2).

Post hoc Tukey tests on all three sexual health topics showed that the male participants were significantly more confident seeking sexual health information from their fathers, compared to other

Table 2. Male, female and trans and gender diverse 14–18-year old's confidence talking to their father about, STIs, contraception and sex.

Characteristic	N	Female, N = 4,377 ¹	Male, N = 3,685 ¹	Trans and gender diverse, N = 201 ¹	p-value ²
		Mean	Mean	Mean	
Confidence discussing STIs with father	7,548	0.75 (1.06)	1.49 (1.39)	0.96 (1.24)	<0.001
Confidence discussing contraception with father	7,304	0.94 (1.24)	1.66 (1.45)	1.25 (1.47)	<0.001
Confidence discussing sex with father	7,355	0.62 (1.03)	1.35 (1.36)	0.88 (1.24)	<0.001

¹Mean (SD).²One-way ANOVA.

participants. Discussing STIs with fathers, males compared to females ($P < .001$), males compared to trans and gender diverse ($P < .001$), there was no significant difference between females and trans and gender diverse participants ($P = .06$). Discussing contraception with their fathers, males compared to females ($P < .001$), males compared to trans and gender diverse ($P < .001$), females compared to trans and gender diverse participants ($P = .006$). And, discussing sex with their fathers, males compared to females ($P < .001$), males compared to trans and gender diverse ($P < .001$), females compared to trans and gender diverse participants ($P = .014$).

Trust in the accuracy of sexual health information provided by their fathers

A one way analysis of variance (ANOVA) on the level of trust in the accuracy of the sexual health information provided to them by their fathers showed, males aged 14–18 years were more likely to trust that the sexual health information provided to them by their fathers was accurate compared to female and trans and gender-diverse participants of the same age (Table 3). A post hoc Tukey test showed that there is a higher level of trust in the accuracy of sexual health information provided by their fathers between males and females ($P < .001$) and between males and trans and gender diverse young people ($P < .001$). However, there was no significant difference in the level of trust in the accuracy of sexual health information provided by their fathers, between female and trans and gender diverse young people ($P = .141$).

Use of fathers as source of sexual health information

Based on the used/not used response to the survey question, 'select all of the sources of information that they have ever used for advice about sexual health'. Males, aged 14–18 years, were more likely to have used their fathers as a source of sexual health information (36.3%) than females (17.5%) or trans and gender diverse participants (17.3%) of the same age (Table 4).

The effect of confidence and trust

An analysis of associations between the dependent variables, confidence in talking to their fathers about sexual health topics, trust in the accuracy of sexual health information provided by their fathers, and use of fathers as a source of sexual health information, and the independent variables of age, regional/remote status, CALD status, religion, and sexual orientation indicated that only the

Table 3. One-way ANOVA results for trust of fathers providing accurate sexual health advice by gender.

Characteristic	N	Female, N = 4,377 ¹	Male, N = 3,685 ¹	Trans and gender diverse, N = 201 ¹	p-value ²
Trust father to provide accurate information	7,070	1.95(1.39)	2.44(1.29)	1.76(1.36)	<0.001

¹Mean (SD).²One-way ANOVA.

Table 4. Male, female and trans and gender diverse 14–18-year-olds use of fathers as a source of sexual health information.

Characteristic	N	Female, N = 4,377 (53%) ¹	Male, N = 3,685 (45%) ¹	Trans and gender diverse, N = 201 (2.4%) ¹	Chi- squared	df ²	p-value ³
Used Father as source of sexual health information	7,373	n (%) 683 (17.5%)	n (%) 1,193 (36.3%)	n (%) 31 (17.3%)	337.55	2	<0.001

¹n (%).²Degrees of Freedom.³Pearson's Chi-squared test.

participants' age and sexual orientation were associated with the use of fathers. Additionally, only sexual orientation was found to be associated with Confidence and Trust. Therefore, the final analysis was adjusted for sexual orientation and age (see Table 5).

As shown in Table 6, when adjusted for age and sexual orientation, the OR for confidence indicates that the male participants who were confident seeking sexual health information from their fathers were 39% more likely to use their fathers as a source of information than those who were not confident seeking sexual health information from their fathers (Table 6). This held true for trust as well, with the OR for confidence indicating that male participants who trusted the sexual health information they received from their fathers to be accurate were 46% more likely to use their fathers as a source of information, compared to male participants who did not trust the sexual health information received.

The male participants in the study, aged 14–18 years who indicated they had confidence in seeking sexual health advice from their fathers, also scored higher on STI knowledge than male participants, who did not have confidence in seeking advice ($\beta = 0.23$, $p < 0.001$). However, male participants who reported that they trusted the sexual health information they received from their fathers to be correct did not have significantly higher STI knowledge than other male participants ($\beta = -0.17$, $p = 0.200$).

There was a small but significant relationship between male participants who were confident in seeking sexual health information from their fathers and male participants who indicated having ever had sex ($\beta = 1.03$, $p = 0.023$). There was a negative relationship between reporting trust in the sexual health information provided by fathers and having had sex ($\beta = 0.92$, $p = 0.019$).

No relationships were found between condom use and either confidence in seeking sexual health information from their fathers or trust that the sexual health information they received from their fathers was accurate.

Male participants who were confident in seeking sexual health information from their fathers were significantly less likely to report experiencing pressure from their parents to remain a virgin ($\beta = -0.03$, $p = 0.004$). There was no association between feeling pressured to remain virgin and trusting that health information from fathers was accurate.

Male participants who trusted their fathers' sexual health knowledge had a negative relationship with sexting behaviours ($\beta = -0.07$, $p = 0.041$). There was no association between the number of sexting behaviours of the male participants and the male participants who indicated that they were confident seeking sexual health advice from their fathers.

Discussion

In this study, we explored the extent to which Australian adolescent males have confidence in talking to their fathers about sexual health topics, and whether they trust that the sexual health information provided to them by their fathers is accurate. We further explored the extent to which confidence and trust contribute to adolescent males' use of their fathers as a source of sexual health information.

Table 5. Association between sociodemographic characteristics and confidence, trust, and use of fathers as sources of information.

Characteristic	n (%)	Confidence			Trust			Use		
		Beta	95% CI ²	p-value	Beta	95% CI ²	p-value	OR ²	95% CI ²	p-value
Age ³	16.37 (1.12)	0.11	-0.29, 0.51	0.600	-0.01	-0.14, 0.12	>0.900	1.31	1.06, 1.64	0.016
Live in regional/remote areas ⁴	762 (22.4%)	0.52	-1.00, 2.00	0.500	-0.03	-0.51, 0.46	>0.900	1.10	0.48, 2.41	0.800
CALD ⁵	205 (54.5%)	-0.90	-1.8, 0.04	0.061	-0.20	-0.50, 0.11	0.200	0.65	0.39, 1.07	0.090
Any religion ⁶	1,302 (36.6%)	-0.83	-1.80, 0.14	0.094	-0.01	-0.33, 0.31	>0.900	0.96	0.57, 1.62	0.900
Gay, bisexual, or questioning ⁷	774 (21.4%)	-1.9	-2.90, -0.77	<0.001	-0.68	-1.00, -0.33	<0.001	0.34	0.17, 0.62	<0.001

¹Mean (SD); n (%).²CI = Confidence Interval, OR = Odds Ratio. Sociodemographic characteristics self-identified by survey participants.³Age, 14–18 years.⁴Rurality, major metropolitan area or other (ABS, 2023)⁵Culturally and Linguistically Diverse status.⁶Not religions or all else. ⁷Sexual orientation.

Table 6. Regression analysis examining the effect of confidence and trust of fathers on variables of interest.

	Statistic	Crude			Adjusted		
		Estimate	95% CI ³	p-value	Estimate	95% CI ³	p-value
Used father – n (%)	1,193 (36.3%)						
Confidence ²		1.38	1.28, 1.49	<0.001	1.39	1.29, 1.50	<0.001
Trust ²		1.47	1.29, 1.67	<0.001	1.46	1.29, 1.67	<0.001
Confidence ² * Trust ²		0.98	0.96, 1.01	0.130	0.98	0.96, 1.00	0.110
STI knowledge – mean (SD)	28 (8)						
Confidence ¹		0.23	0.15, 0.32	<0.001	0.23	0.15, 0.31	<0.001
Trust ¹		-0.27	-0.52, -0.01	0.038	-0.17	-0.42, 0.08	0.200
Ever had sex – n (%)	1,677 (46.5%)						
Confidence ¹		1.03	1.01, 1.05	0.011	1.03	1.00, 1.05	0.023
Trust ¹		0.91	0.85, 0.98	0.007	0.92	0.86, 0.99	0.019
Condom used at last sex – n (%)	1,010 (59.9%)						
Confidence ²		0.99	0.96, 1.02	0.500	0.99	0.96, 1.03	0.600
Trust ²		1.04	0.94, 1.15	0.400	1.04	0.95, 1.15	0.400
Pressure from parents to remain a virgin – mean (SD)	0.74 (1.21)						
Confidence ¹		-0.03	-0.04, -0.01	0.006	-0.03	-0.05, -0.01	0.004
Trust ¹		-0.05	-0.10, 0.01	0.110	-0.05	-0.11, 0.00	0.074
Number of sexting behaviours – mean (SD)	2.21 (2.05)						
Confidence ¹		0.00	-0.02, 0.02	>0.900	0.00	-0.02, 0.03	0.700
Trust ¹		-0.10	-0.17, -0.02	0.009	-0.07	-0.15, 0.00	0.041

¹Beta, ²OR = Odds Ratio, ³CI = Confidence Interval.

*The interaction between Trust and Confidence was not significantly different for Use of Fathers as a source of sexual health information and was removed from the rest of the analyses in this table.

Confidence

The literature describes several reasons young males may not seek sexual health information from their fathers. Traditional father-son sex communications often consist of jokes and innuendo, with little sexual health information provided (Kirkman et al., 2001). Fathers may be embarrassed by these conversations with their sons, which in turn may cause their sons to feel embarrassed (Bennet et al., 2018). Additionally, mothers, who are more likely to be the primary caregiver, often feel more confident than fathers to have sexual health conversations with their children, including males included (Bennet et al., 2018; Flores & Barroso, 2017; Widman et al., 2015; Wright, 2009). However, the results of this study, indicate that Australian adolescent males who completed the Australian National Sex Survey (Fisher et al., 2018), have higher levels of confidence in seeking sexual health information from their fathers than female or trans and gender diverse adolescents. This higher confidence level in young male participants was consistent for all topics analysed, including sex, STIs, and contraception, with their fathers.

A recent review by Connor et al. (2021), highlighted that, many fathers today are embracing non-traditional ways of fathering, and prefer a more 'hands on' approach (Johansson, 2011; Kirkman et al., 2001; Lee & Lee, 2018). Contemporary fathers are prioritizing emotional intimacy with their children and seeking a work life balance, that will enable these relationships (Johansson, 2011). The young male participants in this study indicated that they were more confident in discussing sexual health topics with their fathers than either female or trans and gender diverse participants. Potentially, it is the presence of fathers in their son's life and the resulting interpersonal relationship that contributes to this higher level of confidence in Australian adolescent males who participated in the survey (Kirkman et al., 2001; Wright, 2009).

Trust

While limited in the Australian context, a further documented barrier to father son sex communication, is a lack of or perceived lack of sexual health knowledge on the part of the fathers (Downie & Coates, 1999; Jerman & Constantine, 2010; Wilson et al., 2010, 2010). This lack of knowledge leads some fathers to feelings of inadequacy or embarrassment and subsequently they defer the parent child sex communications to the mother (Downie & Coates, 1999; Jerman & Constantine, 2010; Wilson et al., 2010, 2010).

However, the results of this study indicate that the young male participants trust in the accuracy of the sexual health information provided to them by their fathers. And that this level of trust is higher in the male participants than in either the females or trans and gender diverse participants (Fisher et al., 2018). The higher level of trust in the accuracy of the sexual health information provided by their fathers indicates that for the participants of this study, participation in father son sex communication, resulted in receipt of accurate and appropriate knowledge (Coakley et al., 2017; Malacane & Beckmeyer, 2016).

As with Confidence, this higher level of trust in their fathers' sexual health knowledge by the young male participants may also be related to a non-traditional parenting style of the fathers (Johansson, 2011; Lee & Lee, 2018; Wright, 2009). Fathers who are prioritizing caring and family relationships and fathering in a non or less patriarchal style are now prevalent in Australian society. These fathers potentially have not only confidence in their own sexual health knowledge but the capacity to communicate this with their sons (Kirkman et al., 2001).

Use -the effect of confidence and trust

The results of this study, indicate that over a third (36.3%) of Australian adolescent males who completed the survey reported that they used their fathers as a source of sexual health information. This number was significantly higher than that of female or trans and gender

diverse adolescents. This finding conflicts with studies from the start of the millennium, which suggest that adolescent males are not receiving sexual health information from their fathers and are much more likely to receive sexual health information from their mothers (Downie & Coates, 1999; Kirkman et al., 2001, 2002).

While this study has indicated that the young men in the survey have confidence speaking to their fathers about sexual health topics, they trust that the sexual health information provided to them is accurate, and they are using their fathers as a source of sexual health information, it is not clear that this is contributing to increasing their sexual health knowledge. The participants who had confidence speaking to their fathers, had higher levels of STI knowledge, however they were also more likely to have had sex and had higher incidents of sexting, and less pressure to remain a virgin. This is supported in a recent study by Falconer et al. (2022), who indicated that sexting was more likely to occur within a sexual relationship.

Further, while the young men in this study had higher levels of trust in the sexual health information provided to them by their fathers, this was not found to have any significant impact on their sexual health knowledge or behaviours. They were though less likely to have ever had sex.

Both these findings are consistent with the large body of U.S. research which indicates differing perspectives on the effects of parent adolescent sex communication. While there is significant evidence that parent adolescent sex communications delay sexual initiation (Dilorio et al., 2006; Guilamo-Ramos et al., 2011; Murry et al., 2011; O'Donnell et al., 2002), other U.S. studies report that parent adolescent sex communication is related to an increase in initiation of sex, the number of sexual partners and frequency of sexual activity (Bersamin et al., 2008; Clawson & Reese-Weber 2023; Gillmore et al., 2011; Yang et al., 2007). It is speculated that this difference in findings may be related the age of the adolescents when these conversations were undertaken and that older adolescents may already have been sexually active (Coakley et al., 2017). Thus, suggesting that the 14–18 year age range in this study may be contributing to further conflicting findings.

Strengths & limitations

The size and diversity of the sample provided an important overview of the sexual health knowledge and sexual behaviours of Australian adolescents. The sample closely matched the census data in relation to traditional gender markers, with slightly more females ($n = 4,377$, 53.0%). Similarly, in line with current Australian Bureau of Statistics (2020) the majority of participants identified as heterosexual ($n = 5,959$, 73.0%), while a substantial minority, identified as Gay or Lesbian ($n = 417$; 5.1%), Bisexual ($n = 1317$; 16.1%) or Questioning ($n = 421$; 5.2%).

A major limitation of this study is convenience sampling. Recruitment was undertaken via Facebook, which means that the findings are not representative of adolescents who do not use this online platform. An additional limitation is that the survey was only accessible to participants who could read and write in English and had access to and the ability to use the Internet. This may have prevented some adolescents from ethnically diverse and non-English-speaking backgrounds from participating in the study.

Conclusion

Our findings suggest that a significant proportion of the young Australian males in this study have used their fathers as a source of sexual health information. Having the confidence to have these conversations with their fathers and also being able to trust the accuracy of the sexual health information received plays an important role in this process.

Additional research into the relationship between fathers and sons in the Australian context, may be helpful in understanding father-son communication in general. This may provide insight into barriers and enablers for father-son sex communication.

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Ethics approval

Ethics approval was granted by the La Trobe University Human Ethics Committee (HEC18030).

Data availability statement

Data sharing is not applicable, as no new data were generated or analysed during this study.

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