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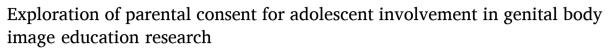
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### **Body Image**

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Brief research report





Gemma Sharp <sup>a,\*,1</sup>, Vanessa Kellermann <sup>b,1</sup>, Yukti Mehta <sup>a</sup>, Anne Nileshni Fernando <sup>a</sup>, Madeline L. West <sup>a</sup>

- <sup>a</sup> Department of Neuroscience, School of Translational Medicine, 99 Commercial Road, Melbourne, Victoria 3004, Australia
- <sup>b</sup> Health Services & Population Research Department, Institute of Psychiatry, Psychology & Neuroscience, King's College London, David Goldberg Centre, De Crespigny Park, London SE5 8AF, United Kingdom

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#### ABSTRACT

Genital body image is a highly understudied concept but is important for sexual health and broader body image satisfaction. Effective genital body image interventions for adolescents have been developed, however, parental consent can be a barrier to adolescent participation. The aim of this study was to conduct a novel exploration of parental consent for genital body image education research and factors related to this consent. Participants were 125 parents of adolescents in Australia who completed an online questionnaire including measures of demographic characteristics, personality traits and attitudes, and likelihood of consent for an adolescent son and daughter participating in hypothetical genital body image education research. The vast majority of parents indicated that they definitely would consent to their adolescent sons' and daughters' involvement in this hypothetical research. There was no significant difference in likelihood of consent based on the gender of the adolescent. Parents having more conservative attitudes towards sex was the only factor tested that reduced the likelihood of providing consent. Overall, our results suggest parents are generally supportive of adolescent involvement in genital body image education research. This concept should be included in broader body image educational programs so adolescents gain exposure to this important but neglected topic.

#### 1. Introduction

Sexual health education during adolescence is essential for supporting sexual health and well-being (Goldfarb & Lieberman, 2021). However, adolescents report limited sexual education experience (Dawson et al., 2019). When sexual education is delivered, it tends to focus on reproductive anatomy and medical issues (Ezer et al., 2018), whilst overlooking more personal topics, such as pleasure, emotion (Astle et al., 2020), and diversity in genital appearance (Stubbs & Sterling, 2020). Despite this foci, knowledge of genital anatomy structure and function remains low, particularly in girls (Fernando & Sharp, 2020). The term 'genital self-image' or 'genital body image' (used interchangeably) refers to one's attitudes, feelings and behaviours surrounding their genitals, and is associated with overall positive body image, sexual health and sexual satisfaction (DeMaria et al., 2011; Herbenick, 2009; Komarnicky et al., 2019). Conversely, negative genital

body image is the major driving factor for requests in adults seeking non-evidence based cosmetic surgeries to alter the appearance and/or size of their genitals (Sharp et al., 2022; Sharp et al., 2016).

Even though genital body image is an extension of body image, genital body image content is generally not included in sexual education classes or programs designed to promote positive body image in young people (Goldfarb & Lieberman, 2021; Kerner et al., 2022). However, school sexual education curricula can vary considerably depending on the country, type of school (e.g., independent versus public/government) and many other factors. In Australia, the focus of this research study, students are generally exposed to the correct terminology for their genital structures (e.g., vagina, vulva, penis, testicles) according to the recommended national curriculum before they reach their teenage years at school (Australian Curriculum Assessment and Reporting Authority, n.d.). Nevertheless, our research suggests that young people in Australia do not necessarily remember these correct terms or how this

<sup>\*</sup> Correspondence to: Department of Neuroscience, School of Translational Medicine, Monash University, 99 Commercial Road, Melbourne, Victoria 3004, Australia.

E-mail address: gemma.sharp@monash.edu (G. Sharp).

 $<sup>^{\</sup>mathrm{1}}$  Gemma Sharp and Vanessa Kellermann contributed equally to this work and so are co-first authors.

information relates to their own bodies and the relationship they have with their bodies (Sharp & Fernando, 2023).

As a consequence, our research team has already and continues to develop age-appropriate genital body image educational materials (Fernando & Sharp, 2020; Sharp & Fernando, 2023). These resources have been shown to be effective in promoting positive genital body image in older adolescents and young adults who could consent to study participation for themselves (Fernando & Sharp, 2020). However, genital body image concerns tend to emerge earlier in adolescence during puberty (Kalampalikis & Michala, 2023; Sharp & Oates, 2019). In our small pilot study with 13-15-year-old adolescents (with parental consent) we found that this younger group was very supportive of genital body image education being included in their sexual health education classes, particularly to help them better understand the changes in their genitalia during pubertal development (Sharp & Fernando, 2023). Importantly, exposure to genital body image education materials does not seem to cause harm to adolescents (Sharp & Fernando, 2023) as is also the case for broader body image education and assessment (Damiano et al., 2020; Jarman et al., 2021).

In ethical research practice, parents are considered to be the "gatekeepers" of adolescent participation in sensitive health focused research (Flicker & Guta, 2008; Knopf et al., 2023; Mathews, 2023). When making decisions about research participation consent, parents appear to weigh the risks and benefits, with the potential for harm to their child identified as a core driver of non-consent (Moilanen, 2016). The requirement for parental consent potentially risks amplifying the opinions of parents and children who are more comfortable discussing challenging areas such as sexual health topics (Moilanen, 2015), whilst silencing those who are not (Flicker & Guta, 2008). Despite the crucial role of parents in adolescent research participation, the topic of consent has not been specifically addressed in genital body image research. However, to our knowledge, Moilanen (2015) was the first to attempt to propose a theory explaining how parents make research participation decisions for their adolescents in a sexual health context. Moilanen (2015) stated that this theory had to be generated from "disparate literatures" (p. 157), namely, research on participation bias in studies of adult sexuality and also studies of adolescent behaviours comparing young people with and without parental consent (e.g., Dent et al., 1993; Dunne et al., 1997). Moilanen (2015) proposed that parental consent decisions may be influenced by the sexual content in the research study, or impacted by parental characteristics such as personality traits and attitudes, and also the child's individual characteristics, for example, how sexually experienced the parent believes the child to be. As our study focus was genital body image, we were not necessarily framing the topic as sexually focused content. Instead, parental characteristics related to likelihood of consent was the focus of our research.

From the limited research to date, for parents who consent to their adolescent participating in sexuality focused research topics including puberty, masturbation, use of contraception, the strongest associations were with the parental characteristics of high extraversion (from the Big-Five personality factors (Costa & McCrae, 1992)), less conservative attitudes towards sex, less importance of religion to their lives, and if the parent perceived their adolescent was already sexually experienced (Moilanen, 2015; Regnerus, 2005). Perceived sexual experience could be considered problematic to ask parents if the adolescent in question was only a young teenager. Notably, the adolescent age range was quite wide (13 to 18 years) in this research (Moilanen, 2015). Although not previously examined to our knowledge, it is also possible that parents may be more supportive of their adolescent's involvement in sensitive health focused research if they themselves have had more positive experiences with their own sexual education as well as the relationship with their own body (e.g., Perez et al., 2018), that is, a higher level of body image satisfaction that they desire for their children too. It remains to be investigated whether these factors are related to parental consent for genital body image education research in adolescents. Furthermore, to our knowledge, whether parental consent decisions in sexual health

contexts differ depending on the gender of the adolescent, has not been investigated. However, differences in broader societal attitudes have certainly been reported towards the genitals of cis girls/women compared to cis boys/men with the genitals of girls/women more likely to be associated with "shame" and "embarrassment" (e.g., Braun & Wilkinson, 2001; Fahs, 2014). In contrast, the genitals of cis boys/men are more commonly linked with a sense of "power" and "masculinity" (e.g., Linstead & Maréchal, 2015). As such, parents may be more inclined to want their daughters to avoid a potentially embarrassing topic and be less likely to give consent to genital focused research participation compared with their sons.

Given the relatively limited literature on parents' perspectives, particularly on the topic of genital body image, this study adopted a mostly exploratory approach. We first aimed to examine the likelihood of parents consenting to 13-15 year old adolescent involvement in a hypothetical genital body image educational research study and their reasons for this perspective. We specifically hypothesised that parents would be less likely to consent to their daughters participating than their sons. On the basis of the limited theoretical work in sexual health research for adolescents, we also hypothesised that parents with higher levels of extraversion, less conservative attitudes towards sex, less importance of religion to their lives, higher levels of body image satisfaction and more positive perceptions of their own sexual education experiences would be more likely to consent. Overall, our goal was to gain a deeper understanding of parental perspectives on the topic of genital body image education research to facilitate greater adolescent engagement in this important health topic.

#### 2. Methods

#### 2.1. Participants and procedure

Participants were 125 people who identified as a parent of at least one son and at least one daughter in the 13-15 year age range living in Australia (see Table 1 for demographic characteristics). The vast

**Table 1** Participant sample demographic characteristics (N = 125).

| Characteristics             | n (%)            |
|-----------------------------|------------------|
| Age in years ( $M \pm SD$ ) | $42.52 \pm 6.90$ |
| Gender                      |                  |
| Woman                       | 109 (87.2)       |
| Man                         | 14 (11.2)        |
| Gender diverse              | 1 (0.8)          |
| Other                       | 1 (0.8)          |
| Ethnicity                   |                  |
| White                       | 113 (90.4)       |
| Asian                       | 7 (5.6)          |
| Other                       | 5 (4.0)          |
| Sexual Orientation          |                  |
| Heterosexual                | 111 (88.8)       |
| Bisexual                    | 10 (8.0)         |
| Homosexual                  | 2 (1.6)          |
| Pansexual                   | 2 (1.6)          |
| Highest Level of Education  |                  |
| Did not finish high school  | 1 (0.8)          |
| Finished high school        | 7 (5.6)          |
| Vocational qualification    | 5 (4.0)          |
| Diploma                     | 5 (4.0)          |
| Postgraduate diploma        | 4 (3.2)          |
| Bachelor's degree           | 50 (40.0)        |
| Master's degree             | 27 (21.6)        |
| Doctorate                   | 26 (20.8)        |
| Religion                    |                  |
| None                        | 100 (80.0)       |
| Catholic                    | 12 (9.6)         |
| Christian                   | 5 (4.0)          |
| Anglican                    | 3 (2.4)          |
| Jewish                      | 2 (1.6)          |
| Uniting Church              | 1 (0.8)          |
| Pagan                       | 1 (0.8)          |
| Baha'i                      | 1 (0.8)          |

majority of participants were women of White ethnicity who identified as heterosexual and did not follow any religion. The sample had a high level of educational attainment with over 82% (n = 103) of the sample achieving a Bachelor degree or higher. The study was approved by the Monash University Human Research Ethics Committee. The research project was titled "Parental consent to adolescent study participation" and was advertised on a range of parent-related online forums on social media. After reading the study information document, participants consented to the research by checking a box and then were given access to the online questionnaire. They completed demographic information, measures of personality traits, religiosity, sexual educational quality, body image dissatisfaction, attitudes towards sex, and likelihood of consent for a 13- to 15-year-old adolescent participating in a fictional research study focused on genital body image education. For the likelihood of consent questions, participants were randomly allocated (using block randomisation) to one of two conditions to investigate any ordering effects; (1) being asked about a consent for a daughter first and son second (n = 64), or (2) being asked about a son first and daughter second (n = 61). In the final section of the study, participants were able to choose whether they wanted to be entered into a draw to receive a store voucher worth \$25 Australian Dollars.

#### 2.2. Measures

#### 2.2.1. Demographic information

Participants were asked their age, gender, ethnicity, sexual orientation, highest level of education achieved, if they followed any religion, and to confirm that they had at least one son and at least one daughter in the 13–15 year age group.

#### 2.2.2. Five-factor personality

Participants were asked to complete the 10-item Personality Inventory which is a very brief measure of the Big-Five personality domains specifically designed to reduce participant burden (Gosling et al., 2003). Participants rated their level of agreement with each item (e.g., "dependable, self-disciplined" for the conscientiousness domain) on a 7-point response scale, ranging from 1 (disagree strongly) to 7 (agree strongly). There were two items per personality domain which were averaged to give an overall score per domain. Reliability for the domains were: agreeableness (Cronbach's  $\alpha=.41$ ), conscientiousness ( $\alpha=.44$ ), extraversion ( $\alpha=.81$ ), emotional stability ( $\alpha=.70$ ), and openness to experience ( $\alpha=.47$ ). Some of the alpha coefficients were low, however, they were comparable to those reported in the initial scale development (Gosling et al., 2003). Nevertheless, for further analyses, only extraversion and emotional stability were retained for analyses owing to their acceptable internal consistencies.

#### 2.2.3. Religiosity

Participants were asked to rate the importance of religion in their daily lives on a response scale ranging from 1 (not at all important) to 5 (very important).

#### 2.2.4. Sexual health education

Participants were asked to rate the perceived quality of any sexual health education they had personally received at school on a response scale ranging from 1 (very low) to 5 (very high).

#### 2.2.5. Conservative attitudes about sexuality

Parental conservative sexual attitudes were measured with five items as reported in Moilanen (2015) and Edwards et al. (2008). An example item was "It is OK for unmarried 16-year-olds to have sex if there is a strong affection" which respondents rated on a 4-point response scale, ranging from 1 (strongly agree) to 4 (strongly disagree). Item scores were summed and could range from 5 to 20 with higher scores indicating more conservative attitudes. Internal consistency was acceptable ( $\alpha=.70$ ).

#### 2.2.6. Body dissatisfaction

The Body Areas Satisfaction Subscale of the Multidimensional Body-Self Relations Questionnaire (Cash, 2000; Giovannelli et al., 2008) was used to measure parental body dissatisfaction. The original nine-item measure covers the full body, and an additional item was added to address genital appearance, given the study topic, to a total of 10 items (Sharp et al., 2014; Sharp et al., 2015). Participants rated their degree of satisfaction with each body part/segment using a 5-point Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied). All items were reverse scored for ease of interpretation. Scores were summed to produce a total score which ranged from 10 to 50. Higher scores indicated greater body dissatisfaction. Reliability for the present sample was high ( $\alpha = .84$ ).

#### 2.2.7. Consenting to research for adolescent

Participants were presented a hypothetical research study scenario involving a 13 to 15-year-old adolescent. To control for ordering effects, respondents were randomised to see either a daughter or son version of the scenario presented first and then the other adolescent second. Thus, all participants provided a response for both a daughter and son scenario. The scenario(s) stated "Researchers at a university are running an online study which aims to educate girls/boys (depending on randomisation) aged 13 to 15 years about their own genital anatomy including the structure and function of the different anatomical parts. The study also emphasizes the natural diversity in genital appearance across girls/ boys and women/men (depending on randomisation). The study involves watching a 2-minute cartoon style video which does not include any real pictures of genitals (i.e., no images which could be considered pornographic)". Similar to Moilanen (2015), after the scenario, participants were asked how likely they would be to provide consent, as the parent, for the adolescent in the scenario to participate in the study on a 4-point response scale from 1 (definitely would not) to 4 (definitely would). The participants were then asked one open-ended question asking for the reasons for their response.

#### 2.3. Data analysis

The data were analysed with SPSS version 27.0 (IBM SPSS, Inc., Chicago, IL). Sample characteristics were reported descriptively. McNemar's tests were used to examine differences in consent category frequencies between adolescent genders and Fisher-Freeman-Halton exact tests were used to examine differences in consent category frequencies by ordering of the daughter/son scenario. Point biserial correlations were used to examine the relationships between parental characteristics and likelihood of adolescent research consent. These correlations were used to identify potential predictors of consent to include in the logistic regression models.

Open-ended response data were analysed using a thematic analysis approach (Braun & Clarke, 2006). Authors G.S. and A.N.F. carefully read all participant responses to the question. The two authors independently coded all responses for pertinent features/initial codes. The two authors then discussed their initial coding strategies and, together, sorted these codes into broader themes. Any disagreements were resolved through discussion.

#### 3. Results

#### 3.1. Likelihood of consent

As seen in Table 2, parents were very likely to consent to participation in the hypothetical genital body image education research for both their sons and daughters. Greater than 80% indicated that they "definitely would" consent for their son or daughter and zero participants reported that they "definitely would not". We hypothesised that parents would be less likely to consent for their daughters compared to their sons, but there was no significant difference in the consent categories

**Table 2** Frequency of parental consent to son and daughter research participation by consent category and scenario order presentation (N = 125).

|                   |         | Category of c             | gory of consent         |                     |                       |  |  |  |
|-------------------|---------|---------------------------|-------------------------|---------------------|-----------------------|--|--|--|
| Scenario Ordering |         | "Definitely<br>would not" | "Possibly<br>would not" | "Possibly<br>would" | "Definitely<br>would" |  |  |  |
| Son               | First   | 0 (0.0)                   | 0 (0.0)                 | 8 (13.1)            | 53 (86.9)             |  |  |  |
|                   | Second  | 0 (0.0)                   | 3 (4.7)                 | 12 (18.8)           | 49 (76.6)             |  |  |  |
| Overall           |         | 0 (0.0)                   | 3 (2.4)                 | 20 (16.0)           | 102 (81.6)            |  |  |  |
| Daughter          | First   | 0 (0.0)                   | 3 (4.7)                 | 14 (21.9)           | 47 (73.4)             |  |  |  |
| Ü                 | Second  | 0 (0.0)                   | 0 (0.0)                 | 7 (11.5)            | 54 (88.5)             |  |  |  |
|                   | Overall | 0 (0.0)                   | 3 (2.4)                 | 21 (16.8)           | 101 (80.8)            |  |  |  |

based on adolescent gender according to the McNemar's tests (all ps>.05). There was also no significant effect for category of consent if the son scenario was presented first or second according to Fisher-Freeman-Halton exact test, p=.164,  $\varphi=.18$  (see Table 2). For the daughter scenario, although there appeared to be a trend towards a difference in consent category responding based on whether the daughter was presented first or second, this did not reach statistical significance according to Fisher-Freeman-Halton exact test, p=.053,  $\varphi=.21$ . Please note that we confirmed there were no significant differences between the son/daughter and daughter/son scenario ordering groups in terms of their demographic characteristics listed in Table 1 (all ps>.05).

The reasons participants gave for their consent rating were analysed using thematic analysis (see Table 3). The two most common responses for both the daughter and son scenarios for the "definitely would" and "possibly would" consent categories were the importance of education in general and then the importance of specifically understanding the diversity in the range of normal genital appearances. For all participants who "possibly would not" consent to their adolescent participating, the reasoning focused on requiring more specific information about the research study and the researchers themselves before a consent decision could be made.

**Table 3** Frequency of themes for reasons given for parental consent responses by consent category for son and daughter scenarios respectively (N = 125).

| Theme and example   | Son<br>n (%) | Daughter<br>n (%) |
|---|--------------|-------------------|
| Response: "Possibly would not consent"                      |              |                   |
| Need to know more about the research project/team           | 3 (100.0)    | 3 (100.0)         |
| "Before I consented, I would want to know details of        |              |                   |
| course, who and how it will be delivered"                   |              |                   |
| Response: "Possibly would consent"                          |              |                   |
| Importance of education                                     | 5 (25.0)     | 6 (28.6)          |
| "Education and knowledge are important"                     |              |                   |
| Importance of understanding the diverse range of            | 3 (15.0)     | 5 (23.8)          |
| normal genital appearances                                  |              |                   |
| "It's important for people to understand their genitals and |              |                   |
| the wide range of normal out there"                         |              |                   |
| Response: "Definitely would consent"                        |              |                   |
| Importance of education                                     | 54 (52.9)    | 60 (59.4)         |
| "Education and knowledge are important"                     |              |                   |
| Importance of understanding the diverse range of            | 28 (27.5)    | 28 (27.7)         |
| normal genital appearances                                  |              |                   |
| "It's important for people to understand their genitals and |              |                   |
| the wide range of normal out there"                         |              |                   |
| Education is coming from a reliable and trustworthy         | 14 (13.7)    | 9 (8.9)           |
| source  |              |                   |
| "Educational purpose and trustworthy researchers"           |              |                   |
| Prefer to avoid unreliable information from other           | 13 (12.7)    | 7 (6.9)           |
| sources   |              |                   |
| "Better they receive correct information from researchers   |              |                   |
| rather than distorted representations online or from peers" |              |                   |
| Knowledge gives power and confidence                        | 10 (9.8)     | 13 (12.9)         |
| "Knowledge is powerit gives confidence in their bodies"     |              |                   |

*Note.* Participant responses could be categorised into more than one theme. Only themes with > 10% frequency for at least one of the scenarios are presented.

#### 3.2. Predictors of consent

The descriptive statistics for the parental trait/attitude measures examined for prediction of consent for participation in the hypothetical genital body image education research are shown in Table 4. Of particular note, on average, the participants did not rate religion as important in their lives and conservative attitudes towards sex were in the low range. As previously described, the vast majority of participants "definitely would" consent to their son and daughter participating in the hypothetical research study and so the dependent variable for the prediction analyses was conceptualised as dichotomous "definitely would" and any level of consent lower than "definitely would" (see Table 2). Thus, the analysis focused on examining the predictors for the "optimal" or "maximal" level of parental consent.

We hypothesised that parents with higher levels of extraversion, less conservative attitudes towards sex, less importance of religion to their lives, higher levels of body image satisfaction and more positive perceptions of their own sexual education experiences would be more likely to consent. We correlated these parental trait/attitude measures with the dichotomous consent variable for the son and daughter research scenarios respectively (see Table 5). The importance of religion and conservative attitudes towards sex were both significantly negatively correlated with optimal parental consent for both the son and daughter research scenarios. So, lower religious importance and less conversative attitudes to sex were associated with optimal parental consent.

The significantly correlated variables were then entered into a logistic regression model predicting optimal consent for the son and daughter scenario separately (see Table 6). The only significant predictor of optimal consent for both research scenarios was parental conservative attitudes towards sex. Specifically, with each unit increase in parental conservative attitudes to sex, there was a 24% decrease (son scenario) and 28% decrease (daughter scenario) in the odds of the parent giving optimal consent for research participation. The overall models for son (*Nagelkerke*  $R^2 = .16$ ,  $\chi^2(2, N = 125) = 13.31$ , p = .001) and daughter scenarios (*Nagelkerke*  $R^2 = .20$ ,  $\chi^2(2, N = 125) = 16.40$ , p < .001) were significant and explained a small percentage of variance.

#### 4. Discussion

To our knowledge, our study is the first to examine parental attitudes towards genital body image educational research and one of a limited number of studies to investigate parental consent to sensitive sexual health and body image-related topics. The parents in our study were very likely to consent to the involvement of their adolescent in hypothetical genital body image education research which bodes well for future research with adolescents. Overall, there were no differences between consent for sons and daughters in contrast to prediction. Furthermore, and contrary to our hypothesis, the only parental characteristic that significantly predicted optimal consent in our study was conservative attitudes towards sex with parents with more conservative attitudes less likely to consent for both their sons and daughters. This research has the potential to provide a much-needed platform for future research as well as adding to the theoretical understanding of parental research consent decisions.

The high likelihood of parental consent found in our study was

Table 4 Means, standard deviations and ranges for parental trait and attitudinal measures (N = 125).

| Measure                       | Range M (S  |              |  |  |
|-------------------------------|-------------|--------------|--|--|
| Extraversion                  | 1.00-7.00   | 4.16 (1.58)  |  |  |
| Emotional stability           | 1.50-7.00   | 4.69 (1.27)  |  |  |
| Religion importance           | 1.00-5.00   | 1.56 (1.06)  |  |  |
| Sexual education quality      | 1.00-5.00   | 3.18 (1.02)  |  |  |
| Conservative attitudes to sex | 5.00-20.00  | 8.47 (2.93)  |  |  |
| Body dissatisfaction          | 11.00-47.00 | 27.12 (6.17) |  |  |

Table 5 Point biserial correlations with optimal parental consent for son and daughter research participation respectively (N = 125).

| Parental trait/attitude       | Son    | Daughter |
|-------------------------------|--------|----------|
| Extraversion                  | .00    | .02      |
| Emotional stability           | 04     | .02      |
| Religion importance           | 20 *   | 18 *     |
| Sexual education quality      | .04    | 01       |
| Conservative attitudes to sex | 35 * * | 38 * *   |
| Body dissatisfaction          | 07     | 07       |

*Note.* \* p < .05, \* \* p < .001

Parental consent outcome coding: "Definitely would" = 1, "Possibly would" and "Possibly would not" = 0.

generally similar to other sexual health research (Moilanen, 2015, 2016), and this extension to genital body image is important. It was also useful to find that parents were supportive of both their sons and daughters participating, which potentially suggests a shift away from shame and embarrassment surrounding discussions of women's genitalia (Mullinax et al., 2015; Sharp & Fernando, 2023). However, further research is clearly needed to confirm such progressions in attitudes. From the open-ended responses, the parents appeared to readily recognise the usefulness of this type of education. Some of the parents who were most likely consent also provided comments about wanting their adolescent to learn this information from a trustworthy source in the research team rather than less reliable sources like pornography (Litsou et al., 2021). The small percentage of parents who "possibly would not" consent all gave the same reasoning of wanting to know more about the research and the research team. This was an understandable response given the very limited information provided to the parents upon which they had to make their decision. Potentially some of these parents may have consented if provided more detailed information as is required for research ethics approval. Indeed, research in health settings (e.g., parents giving consent for their children to be vaccinated against harmful diseases) has generally found that emphasizing the expertise and trustworthiness of the source of health information assists with promoting consent (Pornpitakpan, 2004; Xu et al., 2021). Further investigation of factors such as expertise and trustworthiness of research teams should be conducted as well as more general understanding of parental willingness to consent in order to progress in the field of genital body image (as proposed by the authors) and body image research more broadly (Damiano et al., 2020).

We did not expect such a high level of parental consent for this study which meant that we examined predictors of *optimal* parental consent. With this study focused on hypothetical consent decisions rather than actual decisions and the reported gap between intention and behaviour (e.g., Conner & Norman, 2022; Sharp et al., 2013), it seemed appropriate to investigate *maximal* parental consent. In contrast to the sexual health focused consent theory framework (Moilanen, 2015) and our own predictions, conservative attitudes towards sex was the only significant negative predictor of consent for both sons and daughters. Only a relatively small percent of a variance was explained by the models, clearly demonstrating the impacts of untested variables. Factors related to the relationship between the parent and adolescent such as the extent to which parents had already had conversations with their children about

genital appearance and function and other sexual health topics (including knowledge of what their children had already learned at school) would likely play a role and should be included in future studies.

We also cannot be certain of the reasons why more conservative attitudes may lessen likelihood of optimal consent. Although, it must be noted again that the parents in our study had, on average, low levels of conservative attitudes. It is possible that some of the parents believed that exposure to genital body image content may accelerate the sexual development of their adolescent (Davies & Robinson, 2010). Nevertheless, it is unlikely that (genital) body image researchers will be able to change the attitudes of parents with more conservative attitudes. Instead, we propose that genital body image education be included in general body image programs for adolescents. In this way, the genitalia are more likely to be viewed in conjunction with other body parts and thus can be understood and accepted for their function, not only in relation to sexual activities (e.g., external genitalia protect the genital tract from infection in cis women). In this way, parents may be more likely to consent to their adolescent engaging with this content when the focus is on the whole body. Certainly, our previous research has shown that adolescent girls believe genital body image education should be provided in school settings (Fernando & Sharp, 2020; Sharp & Fernando, 2023). To our knowledge, positive body image programs in schools do not specifically address genitalia (Kurz et al., 2022; Yager et al., 2013), and this appears to be a potentially missed opportunity to promote body appreciation more holistically. Of course, there is always the opportunity to reinforce knowledge surrounding the structure and function of the genitalia in other classes such as biology and science.

There are several limitations with the current study. Firstly, the sample was predominantly composed of White, heterosexual, highly educated women in Australia who did not follow any religion and were less conservative in their attitudes towards sex. Therefore, it is unclear whether our results generalise to other groups in other geographic regions. Furthermore, our sample size did not provide sufficient statistical power to allow subgroup analysis (e.g., comparing the views of women versus men parents) or to detect small effects. Moreover, given the very high levels of consent reported, it is likely that some participants were motivated to respond in a socially desirable manner and that parents who were the most supportive of this type of research volunteered to participate in the first instance. In addition, the description of the hypothetical research scenario was rather brief for parents and, in reality, would have included ethics approved detailed information on what would be required of their child at every stage of the research. Future research could include a mock-up of an information sheet for parents so they have all of the research details upon which to base their decision. Moreover, a more comprehensive measure of the Big-Five personality traits should be used in further studies as the measure used in the current study was very brief with some accompanying psychometric concerns. The study would have also likely benefitted from a specific genital body image measure for parents to complete rather than a single item included with a general body image satisfaction measure. In addition, future research should move beyond the son and daughter scenarios and include research scenarios focused on gender diverse adolescents.

In conclusion, this study provides novel insights into parental support for adolescent participation in an understudied research topic in genital body image and provides an important platform for future

Table 6 Logistic regression models for predictors of optimal parental consent for son and daughter research participation respectively (N = 125).

|                               | Son |      |                        |      |      |              | Daughter |      |                        |        |      |              |
|-------------------------------|-----|------|------------------------|------|------|--------------|----------|------|------------------------|--------|------|--------------|
|                               | В   | SE B | Wald<br>X <sup>2</sup> | p    | OR   | 95% CI<br>OR | В        | SE B | Wald<br>X <sup>2</sup> | p      | OR   | 95% CI<br>OR |
| Religion importance           | .02 | .26  | .01                    | .937 | 1.02 | 0.62-1.68    | .13      | .26  | .23                    | .633   | 1.13 | 0.68-1.90    |
| Conservative attitudes to sex | 28  | .10  | 8.23                   | .004 | 0.76 | 0.63-0.92    | 33       | .10  | 11.03                  | < .001 | 0.72 | 0.59-0.87    |

Note. OR = Odds Radio; CI = Confidence Interval.

Parental consent outcome coding: "Definitely would" = 1, "Possibly would" and "Possibly would not" = 0.

research including further theory development. Overall, the parents were supportive of adolescents being involved in genital body image education research for their sons and daughters. The only potential barrier to optimal consent identified in the study was conservative attitudes towards sex. As such, we recommend that genital body image content be included in standard positive body image education programs in schools. In this way, it may help to remove some of the stigma surrounding the topic and encourage young people to accept their genitalia along with the rest of their bodies.

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#### CRediT authorship contribution statement

Gemma Sharp: Writing – review & editing, Writing – original draft, Supervision, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. Vanessa Kellermann: Writing – review & editing, Writing – original draft, Conceptualization. Anne Nileshni Fernando: Writing – review & editing, Writing – original draft, Conceptualization. Yukti Mehta: Writing – review & editing, Writing – original draft, Conceptualization. Madeline L. West: Writing – review & editing, Writing – original draft, Conceptualization.

#### **Declaration of Competing Interest**

Nothing to declare for A/Prof Gemma Sharp, Vanessa Kellermann, Yukti Mehta, Anne Nileshni Fernando, and Madeline L. West.

#### Data availability

The data that has been used is confidential.

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None of the authors have any conflicts of interest to disclose.

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